ARCHIEC

& BUILDING NEWS

3 FEBRUARY 1960

VOL. 217 NO. 5 ONE SHILLING WEEKLY

- NEW SCIENCE BUILDINGS, LIVERPOOL
- CURRENT MARKET PRICES

PUBLISHED IN LONDON SINCE 1854

These names make aluminium news. Imperial Chemical Industries and Aluminum Company of America, household words on both sides of the Atlantic, combine to form a new name in aluminium—IMPALCO. Backed by ALCOA'S unmatched experience in the specialised field of aluminium and by I.C.I.'s great resources and world-wide organisation, IMPALCO will provide a new major source of aluminium.

impalco for aluminium

Imperial Aluminium Company Limited · Birmingham

Jonwindows Curtain Walling



Swansea Technical College. New Workshop Block for the Swansea Education Authority



This typical example of steel reinforced aluminium curtain walling provides a clean, bold conception of line and colour. Facing out over Swansea Bay and overlooking the developing new town centre, the elevation shown above meets the full force of south-westerly coastal gales and is constantly exposed to a salt-laden marine-urban atmosphere. Qualities of strength and durability are therefore tested to the full all the time. Designed on a 3' 4" lateral modular basis 22 ft high, covering first and second floors, construction is a combination of galvanized steel rib supports with aluminium cladding extrusions. Floor band panels are of coloured ply-glass with linear board backing.

JOHN WILLIAMS OF CARDIFF LTD

EAST MOORS ROAD, CARDIFF. Tel: Cardiff 33622 (12 lines) Telex 49303

To please eyes that look at precious stones...

Wall Panelling with



THE MELAMINE SURFACE PLASTIC

Panax, outstanding plastic panelling of today, provides the setting for the committee room and the entrance hall in the British Jewellers' Association building.

Here is an invaluable material which offers designers everywhere such opportunity for distinction. Smart to see, virtually impossible to mark, Panax is made in a colourful variety of patterns. An extremely economical material too, Panax is up to 20% cheaper than similar surfaces.

Finished with melamine, the hardest known resin, versatile Panax allows you a choice of décor—in modern or traditional idiom—that keeps its youthful look throughout a long life. Panax resists heat (up to 320° F), oils, mild acids and alkalis . . . is highly resistant to chipping, flaking and scratching . . . and wipes clean and fresh as new with a damp cloth.





Photographs by courtesy of the British Jewellers' Association





THE MELAMINE SURFACE PLASTIC

For full information about this colourful material with a special apriliade for modern design write to NORTH BRITISH PLASTICS LIMITED Blaydon, Co. Durham



The NETTLE '1000' Range is designed to give the architect and interior designer a comprehensive selection of pendant and batten-type Lampholders in keeping with contemporary trends. These fittings, in white, black and dove-grey, are in accordance with the latest supplement to B.S. 52. They are, incidentally, highly competitive in price.

> Selected by the Council of Industrial Design for display at the Design Centre. Prize winning exhibit at the 1959 A.S.E.E. Exhibition.



NETTLE ACCESSORIES LTD.

Sales Division:

WARREN ST. STOCKPORT CHESHIRE Tel: STOckport 7155

MEMBER OF THE AERIALITE GROUP OF COMPANIES

the logical use of colour in building no. 1

introduction:

Few subjects can claim a more diverse group of interests than colour.

Psychologists, photographers, physicists, physiologists, philosophers, printers, paint manufacturers, lighting engineers and artists are but a few with such interests, each with their own problems and inevitably each with their own definitions — a babel of many tongues. The chemist employs it as a generic term for dyes, pigments and like materials. The physicist regards the term as a description of certain phenomena in optics. Physiologists and psychologists use the term to denote a sensation in the consciousness of a human observer. Colour is a household word as well and is commonly used indiscriminately in all three senses.

The three definitions are firmly rooted in the language and it is futile to expect one definition only to be adopted. The definition used must be the one most nearly applicable to the case under consideration.

There is no difficulty in distinguishing the use of the word "colour" to mean a pigment, dyestuff or other coloured material in a finely divided form, but the distinction between the objective physical definition and the subjective psychological one is more subtle. The objective measurement of colour is a physical reality and once determined remains fixed. The sensation that results when one looks upon a coloured object depends to a considerable extent upon the nature of the surrounding field and the nature of the field to which the observer has previously been exposed.

It is intended to run a series of these announcements which will endeavour to outline the importance of the subjective use of colour to the architect and building designer, and to show how such knowledge can be used.

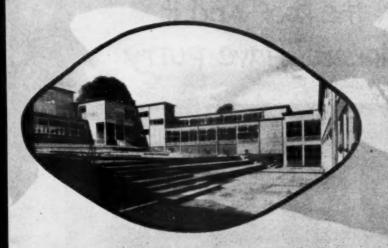
Goodlass Wall & Co. Ltd., Corn Exchange, Liverpool 2, or 179 185 Gt. Portland Street, London, W.1

COLOUR

New INTERGRID

LONGER SPANS . TALLER BUILDINGS

HEAVIER LOADS . QUICKER ERECTION



Intergrid is a system of construction for buildings or building frames making use of prestressed concrete and designed to comply with Model Bye Laws and Codes of Practice.

intergrid is the most advanced system for reinforced concrete frames and is suitable for every type of multi-storey building. Provision has been made in the design to allow Architects complete freedom of planning and to incorporate traditional cladding and other features.

THE FINEST STRUCTURAL FRAME FOR ALL TYPES OF BUILDINGS

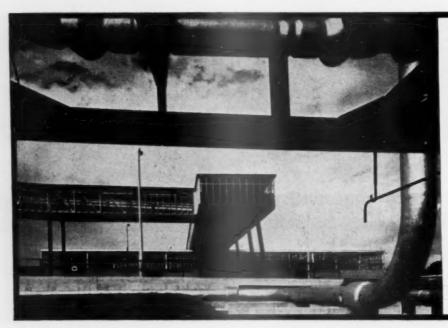


2 STANHOPE GATE · LONDON · W1 · GROSVENOR 8801 STEVENAGE · COVENTRY · LIVERPOOL · GLASGOW

Building and Civil Engineering Contractors



patent glazing is like windows only BIGGER and often it's IN The Roof and it doesn't Have Putty



The new Heinz factory at Wigan is the largest factory to be built in Britain since the war. Shown here is the ancillary can factory, clad in Williams & Williams "Aluminex" vertical patent glazing. The continuous opening lights are gear-operated to give critical control of ventilation.

Architects:
J. Douglass Mathews
and Partners, London
in association with
Skidmore, Owings
and Merrill, New York.

The new Heinz factory is turning depressed Wigan into a boom area. By the time it is in full production it will be employing some 3,000 local people and taking up a good deal of the local agricultural produce, which is both abundant and high in quality.

The 127-acre site has a gradient of 1 in 40 which has been exploited to give the factory two working levels—both accessible to lorries.

Manufacture starts on the upper level with unloading, storage, preparation and cooking. Products are then gravity fed to the lower level for can filling, sterilization, packing, warehousing and finally dispatch.

The presence of old coal mines underneath the site meant careful positioning of the component buildings. The can factory is therefore at some distance from the food production unit



ALUMINEX SIDEWALL GLAZING HAS BEEN USED TO CLAD

the service gantry which takes finished cans across to the main factory for filling

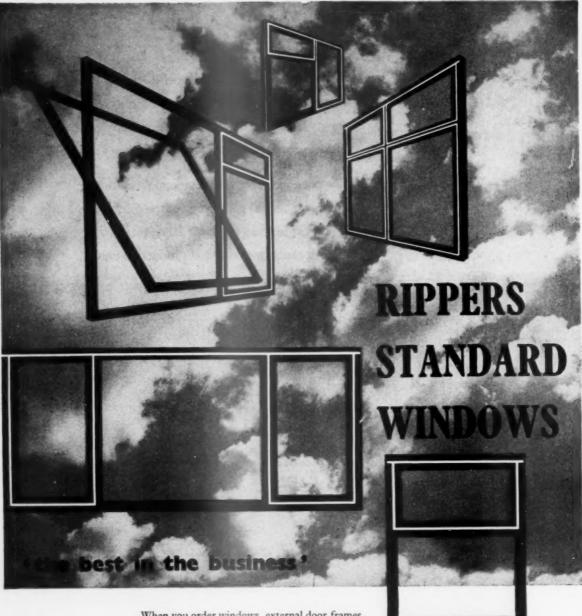
> and the covered footway connecting the two factories.



and is linked to it by a service gantry which feeds the finished cans into the appropriate stage of production process.

forward looking building products WILLIAMS & WILLIAMS

Williams & Williams make steel windows of every description, ALOMEGA and other aluminium windows, movable steel and glass partitioning, ALUMINEX patent glazing, WALLSPAN curtain walling and many other products, all of which can be seen at our permanent window exhibition at No. 36, High Holborn, London, W.C.1. WILLIAMS & WILLIAMS, RELIANCE WORKS, CHESTER . WILLIAMS HOUSE, 37-39 HIGH HOLBORN, LONDON, W.C.1

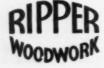


'you'll be glad you chose WOOD windows' When you order windows, external door frames, internal door frames or kitchen units, make sure you buy Rippers—the finest standard joinery obtainable. Over sixty years experience is behind Rippers quality—

Write today for our free Catalogue: it describes over three hundred designs from which endless window combinations can be arranged, and includes descriptions of all our products. Apply for your free catalogue to Dept. ABN.3/2.



RIPPERS STANDARD KITCHEN UNITS



RIPPERS LIMITED

CASTLE HEDINGHAM, HALSTEAD, ESSEX
TELEPHONE: 191 HEDINGHAM (4 LINES) TELEGRAMS: RIPPERS, CASTLE HEDINGHAM
LONDON OFFICE: 9, SOUTHAMPTON PLACE, LONDON, W.C.1. TELEPHONE: CHANCERY 8306.7

Canute couldn't stop it ...

Sealocrete P.V.C. Waterbar can!



Inserted between each lift whilst the concrete is being placed, Sealocrete P.V.C. Waterbar ensures there is no seepage of water through floor to wall and construction joints.

Sealocrete P.V.C. Waterbar is made of a special grade of unfilled Polyvinyl Chloride, is chemically inert, non-corrosive and resistant to ageing.

Being flexible, it is specially recommended for joints where limited movement is expected. Cross and Tee Sections can also be supplied pre-fabricated.

Write for descriptive leaflet giving full information.

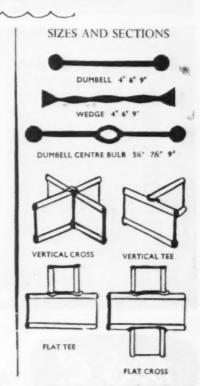


SEALOCRETE PRODUCTS LIMITED

ATLANTIC WORKS · HYTHE ROAD · LONDON · N W IQ

TEL Ladbroke ool (PBE

TELEGRAMS & CABLES: SEALOCRETE, WESPHONE, LONDON



Every Heating Installation has its own problem

Which &&.C. system is best for you?

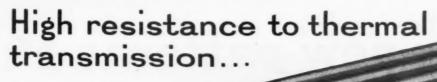
The G.E.C. manufactures a full range of industrial electric space heating equipment providing complete installation schemes to meet any type of individual requirement. A G.E.C. planned scheme means all-round economies-in layout, erection time and fuel consumption.



Write for publication H5 for further details



G.C. Industrial Electric Space Heating





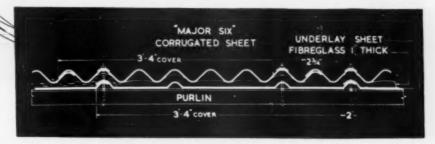
DOUBLE CLADDING INSULATION

"Major six" DOUBLE cladding insulation provides a high resistance to thermal transmission, contributing to higher equable interior temperature and consequent economical heating. Here is dependable roofing made for quick erection and permanent service.

It's the DOUBLE cladding that does it!—a rigid asbestos-cement underlining sheet laid directly to purlins as a soffit upon which the sheet of insulation is laid before putting the "Major six" sheet in position.



Photograph above illustrates interior view of roof



Easily fixed with hook bolt and washers "Major six" Double Cladding Insulation complies with the requirements of "Thermal Insulation Industrial Buildings" Act.



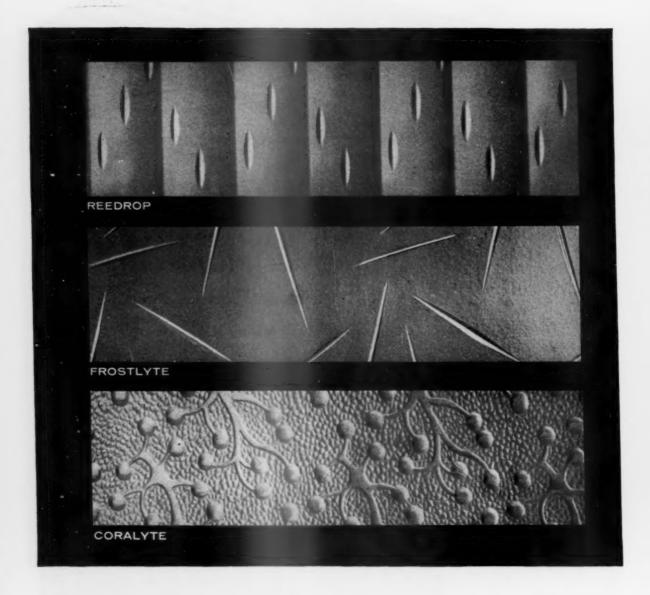
ARTILLERY HOUSE · ARTILLERY ROW LONDON SW1

Telephone: ABBey 3081.

Telegrams: "Atlastonco, Sowest"

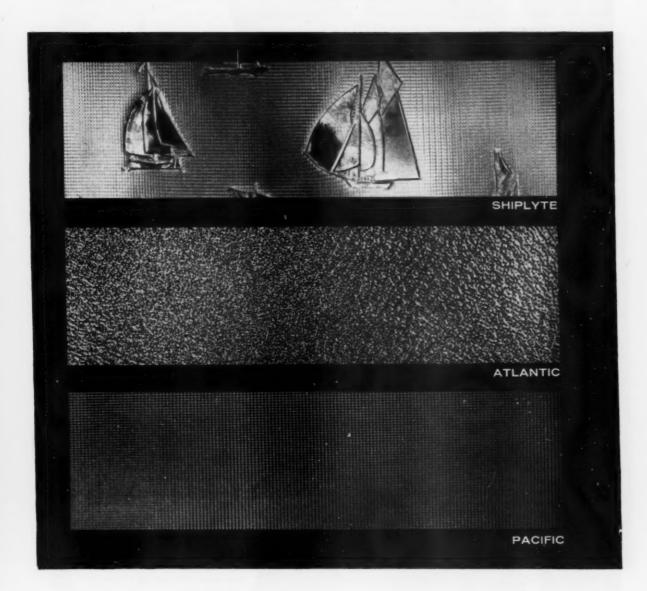
Works at: Meldreth, Nr. Royston, Herts. Also at: Greenhithe Strood Cambridge Shorne Rye (Sussex) GT. YARMOUTH

Six new patterns of



As well as adding new decorative opportunities to the extensive range of Pilkingtons' Cathedral, Figured Rolled, Reeded and Fluted Glasses, these new patterns, with their varying degrees of obscuration have a wide range of functional applications. For full details write to Pilkingtons' Technical Sales and Service Department.

figured rolled glass



PILKINGTON BROTHERS LIMITED

ST. HELENS · LANCASHIRE · TEL: ST. HELENS 4001



London Office: SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, LONDON S.W.I TEL: WHITEHALL 5672-6

Supplies are available through the usual trade channels.



Old Change House, London EC4, Architect: Theo H. Birks F.R.I.B.A. Contractors: Bernurd Sunley & Sons Ltd

- new heeds

New needs, new architecture, new buildings—and new ranges of Crittall windows.Crittall aluminium windows, designed to match the most forwardand upward-looking architectural concepts and ready to meet the toughest, down-to-earth practical service demands.

Thorough, painstaking researches on an international scale, the application of the most far-reaching advances in design and manufacturing techniques, and a new factory specialising in the production of aluminium windows and equipped with an anodising plant as up-to-the-minute as any in the world. All this, added to Crittall's already long experience in making metal windows of all kinds, will help to make the larger, higher, buildings of the future more efficient to live in and work in, less costly to maintain.

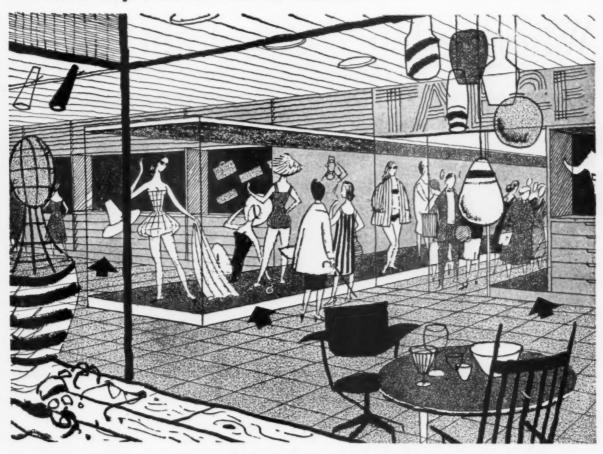
WINDOWS by CRITTALL

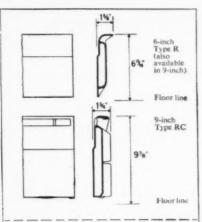
Old Change House, for the Bernard Sunley Investment Trust Ltd., is fitted with Crittall 'Continental' Windows with 'Solomatic' Venetian Blinds throughout. Write for fully descriptive leaflet to:

THE CRITTALL MFG. CO. LTD. BRAINTREE · ESSEX

Branches and Depots throughout the country

When every inch of wall is wanted





Manual (No.423) on Crane Skirting Heating may be had on application to

CRANE LTD., 15-16 RED LION COURT FLEET STREET, LONDON, EC4

London Showrooms: 118 Wigmore Street, London, W.1 and Great West Road, Brentford, Middlesex

Branches:

HIRMINGHAM · BRENTFORD · BRISTOL GLASGOW · LEDS · LONDON · MANCHESTER Works: IPSWICH WHEREVER maximum space is a functional necessity—and there are many instances, such as shops, libraries and exhibition rooms—the problem arises of how to make provision for a heating system that gives the proper requirements of evenly distributed warmth, functions economically, and neither takes up useful wall space nor offends aesthetically by spoiling a clean-looking line.

There is one system which architects are now coming to look upon as the best answer to this problem. It has been evolved by Crane Ltd. (already well known for other types of heating equipment) and employs heating panels in place of the usual skirting boards. It is clear that this system gives the designers considerable flexibility of arrangement. The heating panels are quite unobtrusive and, being capable of encircling the entire room if necessary, eliminate 'hot spots' and distribute the warmth evenly where it is wanted. In the illustration the position of Skirting Heating panels is indicated by arrows. It will be readily appreciated how well this system answers the condensation problem here.

There are two types of panel. Type R—purely radiant—in 9-inch panels to match Type RC, and in 6-inch panels for use where less heat is required: and Type RC (radiant-convector) 9-inches high. The panels used in the example illustrated are 6-inch Type R. All panels are in 2-ft and 1-ft lengths and are made of cast iron, which gives them considerable resistance to accidental damage. The operations of calculating heat requirements and designing the pipework are in principle no different from those for conventional radiator heating systems.

Wherever the architect needs greater freedom of expression than conventional heating systems allow him, and at the same time has to pay due consideration to costs, the answer is, undoubtedly,

CRANE skirting heating

Where silence is golden...



Passed is the day when only the scratch of pen or the tinkle of sovereigns disturbed the church-like quiet of our great banks. The pace of banking business has called for all the mechanical aids available to the modern office—together with their inevitable noise. So banks have been quick to appreciate the need for Hermeseal acoustic installations. These are designed for wall and ceiling treatment in keeping with existing decor—or as an integral part of new construction.

Full information will be supplied on request.

HERMIESEAL

HERMESEAL ACOUSTICS LIMITED

Head Office: 4 Park Lane, London, W.1.

Telephone: Grosvenor 4324



EVEN UNDER THE MOST TESTING CONDITIONS AGAVECTOR GIVES MORE HEAT FOR LESS FUEL!



Practical proof of Agavector's supreme place among today's heating systems

Practical tests in newly built houses have demonstrated the superiority of the Agavector over other heating systems. Even under deliberately chosen adverse conditions, the Agavector has given higher temperature rise, better heat distribution, and lower fuel consumption.

Actual temperature figures and house plans may be seen on request. These

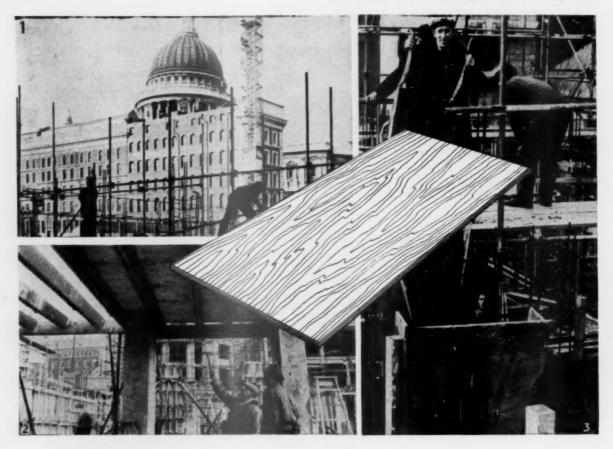
give convincing proof of the efficiency of the Agavector. You are invited to write to us for constructional details.



ALLIED IRONFOUNDERS LTD. 30 Orchard Street, London, W.1

AGAVECTOR for DORMY houses!

For their new Dormy houses being built in London, Croydon, Shirley and Epsom, Wates Built Homes Ltd. have chosen the Agavector Senior for economy-with-design heating.



Seaboard Fir Plywood in Oction!

Shown above are excellent examples of how Seaboard fir plywood saves time and reduces cost. Picture (1) shows general shot of building site with all concrete shown being poured in fir plywood forms. Picture (2) shows plywood used as shuttering for pouring slab floors.

Picture (3) shows fir plywood shute used for pouring the concrete in the same building. Strong, tough and split-proof—yet light and easily handled—Seaboard fir plywood is proving eminently suitable for re-usable formwork. Investigate today!

N. R. M. MORISON, ESQ., 1 - 3 Regent Street, London S.W. 1

Please send me free copy of Seaboard Plywood Handbook (L-11) describing your full selection of Douglas fir Plywood.

Name......Address....

(Please print plainly)

UK-59-34-I4



SEABOARD

CANADIAN DOUGLAS FIR

PLYWOOD

SEABOARD LUMBER SALES CO. LIMITED Seaboard House, Vancouver 1, Canada

Ceilings by BURGESS

Manufactured in twelve different modules

BURGESS PRODUCTS CO. LTD. ACOUSTICAL DIVISION HINCKLEY, LEICS.



There is no protection like lead for roofs and joints that are exposed to all weather conditions. Lead provides the perfect, permanent protection. We supply lead sheet, pipe and strip for all building purposes, antimonial sheet and pipe, lead tape, sash weights, etc., and chemical lead for special application.

GLYNN

PARK ROYAL RD., LONDON, N.W.10 Tel: ELGAR 7011 TRAFFORD PARK, MANCHESTER, 17. Tel: Trafford Park 1444. SOUTH WALES WAREHOUSE-

PENARTH RD, CARDIFF. (Tel: 22502).

Associated Company:

THE WEDNESBURY TUBE CO. LTD., BILSTON, STAFFS,

Manufacturers of:

SOLID DRAWN COPPER TUBES: PLASTIC TUBES AND FITTINGS: STEEL TUBES AND FITTINGS: STEEL TUBE FABRICATIONS: MALLEABLE TUBE FITTINGS.

ARBOLITE

METAL CASEMENT PUTTY



the perfect KEY



for glazing METAL WINDOWS

ARBOLITE Metal Casement Putty is the key to the successful glazing of metal windows. Eliminates cracking and wrinkling because it contains ARBOSYN, which ensures greater durability, better adhesion and controlled setting properties.

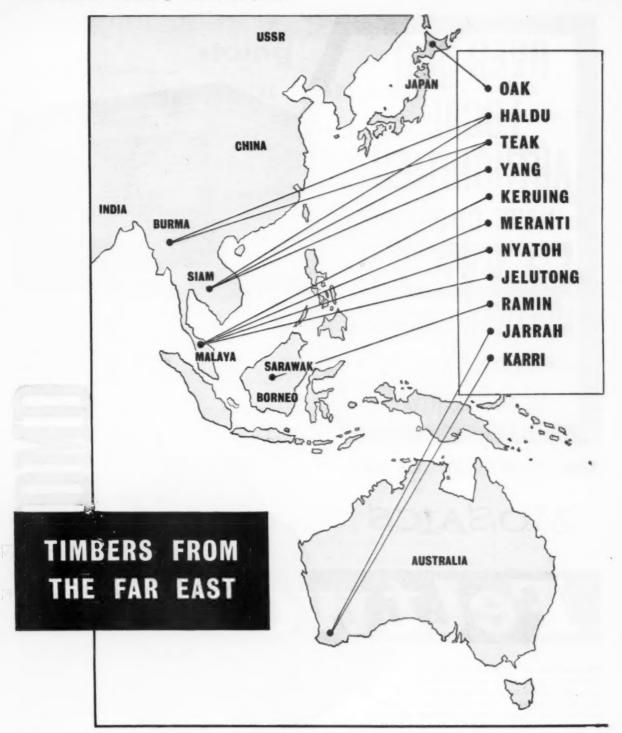
the master glazing compound, that bonds glass to metal makes **METAL WINDOWS**

last LONGER



ADSHEAD RATCLIFFE & CO. LTD

BELPER · DERBY Tel: Belper 351/2

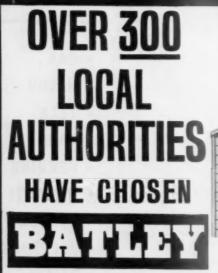


Denny Mott & Dickson Limited

Importers & Stockists of Hardwoods, Softwoods, Plywood & Wallboards

ADELAIDE HOUSE, KING WILLIAM STREET, LONDON, E.C.4
Telephone: MANSION HOUSE 0550

Belfast, Birmingham, Bristol, Cardiff, Glasgow, Hull, Liverpool, Manchester, Newcastle, Preston, Southampton



MULTIPLE GARAGES

— concrete proof of reliability!

Godiva Ribbed Multiple Garages



five years' free fire insurance; any number in one block. Attractive deferred terms. Extensive free delivery area.

Write for free illustrated brochure

ERNEST BATLEY LIMITED

96 Colledge Road, Holbrooks. Coventry 89245 96 New Islington, Manchester 4, and 123 Shepperton Road, London, N.I

the new way to say

MOSAICS

Feltwood

FELTWOOD is real wood flooring—in ready-to-lay panels of in hardwood blocks indissolubly bonded to an underlay of damp-resist-ling felt. The mosaics cannot work loose. A heated building is not required, yet it withstands all forms of under-floor or ceiling heating.

FELTWOOD is easily laid, is available in many lovely hardwoods, has every single advantage of a traditional wood floor plus the damp-resistance and extra resilience the felt gives it—and it

COSTS BARELY MORE THAN SYNTHETIC FLOORING

MANUFACTURED BY

VIGERS

Write for leaflet ABF and sample panel of Feltwood—

VIGERS BROS. LTD., Ludgate Broadway,

London, E.C.4. Tel: CITy 2111 and at Belfast, Exeter, Cardiff, Birmingham.



doing what comes neighbourly...



Authority: Surrey County Council.

County Architect: J. Harrison, A.R.I.B.A.

Mutual protection is the neighbourly policy of the Cellon Company and the Kingston Fire Brigade next door — protection from fire for the Cellon premises, and weather protection by Cerrux paints for the Fire Station. Cerrux paints are specified for long-lasting protection in schools, hospitals, factories, offices and public buildings throughout the country.

...the finishing

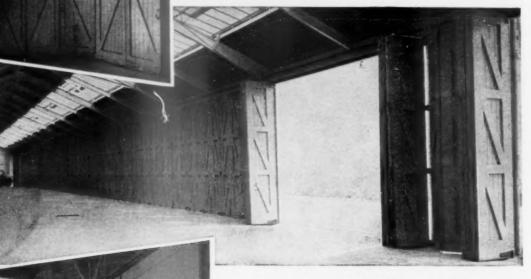
touch is

CERRUX

Famous 'TANGENT'

for DOORS SLIDING AND FOLDING and DOORS SLIDING ROUND THE CORNER up to 20 ft. high and for any width of opening.

Despatch bays of William Jackson & Son Bakery, Stockton-on-Tees. Opening 84ft. wide overall.



STRAIGHT-RUN

SINGLE - DOUBLE - TRIPLE TRACKS

Industrial Doors in either wood or metal

TUBUAR TRACKS (10 sizes) take the weight above. BOTTOM ROLLERS (4 sizes) for weight on the floor.

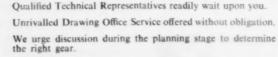


'ULTRA'

OVERHEAD GARAGE GEAR

Overhead Doors are safequiet-always positive-on Henderson 'ULTRA' Gear. 4 Standard Sets available for doors from 40 lbs. to 210 lbs. Request List OD

Every room in every Architect's office should have a Henderson Catalogue 55. If not, write for a copy.



ent' doors at the Maidstone and District Motor Service Borough Green Depot

Henderson

SLIDING DOOR GEAR

for any door, window or partition that slides or folds

P. C. HENDERSON LIMITED, HAROLD HILL, ROMFORD, ESSEX.

Tel.: INGrebourne 41111 (Dial I.L.4).



The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854.

Annual subscription: home, £2 18s. 0d.; overseas, £3 8s. 0d.; Canada and U.S.A., \$10,00. Registered as a Newspaper
Published by ILIFEE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.I.

Telephone: Waterloo 3333 (60 lines). Telegrams: "Architonia, Sedist, London"

Branch Offices: Coventry: 8-10 Corporation Street; telephone, Coventry 25210. Birmingham: King Edward House, New Street, 2; telephone, Midland 7191. Manchester: 260 Deansgate, 3; telephone, Blackfrians 4412 and Deansgate 3595. Glasgow: 26s Renfield Street, C.2; telephone, Central 1265

© Iliffe & Sons Ltd. 1960. Permission in writing from the Editor must be obtained before letterpress or illustrations are reproduced from this journal. Brief abstracts or comments are allowed provided acknowledgment to the journal is given

OUTDOOR ADVERTISING

THE control of advertisements has on the whole been one of the most successful pieces of negative planning since the war. Like all such successes we are largely unconscious of it and only notice the difference on returning from some of the more inhibited countries on the Continent or from America where advertising enthusiasm has run riot.

Like all negative control, it has spared us the worst but not given us the best. Welldesigned and well-placed advertisements can do much to add sparkle and gaiety to towns; they are rarely justified in the country. The two painters carrying a ladder, still to be seen from many railway lines, are a classic example of incongruity.

The problem is how to encourage the good while still discouraging the bad. And it will never be solved satisfactorily without enlisting the active support of the advertising agencies themselves and raising their standards. The standard of advertising in Scandinavian countries has shown that effective advertising can be combined with first-rate commercial architecture to their mutual visual benefit.

For these reasons the Minister of Housing's new amendments to the Advertisement Regulations* must be given a guarded welcome. The intention is to allow local authorities to simplify and loosen the code in special areas in the hope that they will extend these areas to much more of the countryside.

At present only about a fifth of the country is so controlled.

If local authorities co-operate by extending the special areas, and if they administer them sensibly, and if those concerned with the advertising respond by showing a greater sense of responsibility, a more positive and creative approach to their task, then we shall have taken a decisive and very significant step towards solving the greater planning problem of how to impose restraint without stifling initiative.

An encouraging sign that the industry is alive to its responsibility is the fact that the Advertising Association has drawn up a voluntary code for the use of its members. This code is going to be published in March.

The success of the arrangement will depend very much on what the code says and the extent to which it is adhered to by the profession as a whole. The difficulty is, of course, that in some cases of advertising, quite literally, the sky is the limit. The Piccadilly inquiry has been a sharp reminder of this. Any such ill-considered enthusiasm would be a pity, as it would lead to an equally violent reaction. The new regulations are an indication that at Ministry level, at least, the problem is being tackled with a sense of proportion and a full realization of the many factors involved; if this is met by an equal response by all other parties involved, all should be well.

^{*} The Town and Country Planning (Control of Advertisement) Amendment Regulations, 1960. H.L.G. 8345.

EVENTS AND COMMENTS

BUILDING PROSPERS

The Minister of Labour, Mr. Edward Heath, told the London Master Builders' Association, at their annual luncheon last week, that construction work in hand in the industry was £35 million up on last year. He also said that in London there were 23,000 houses under construction, compared with last year's figure of 19,000. The intake of men into the industry during the past year had increased by nearly 20 per cent; this was most satisfactory, but would have been even more so had it represented the numbers of indentured apprentices. The Minister suggested that changes of craft training might be on the way to make men more versatile and provide them with a greater range of skills. In this way the industry could adapt itself to new and changing techniques. On a more sombre note, Mr. Heath pointed out that in 1958 there were 207 deaths on building sites in the country and 15,000 reported accidents. While commending the association's work on this subject of safety in the past, he urged it to even greater efforts.

Mr. K. J. Pearce, the outgoing president, had been able to welcome the Minister without having to make any great complaints about the Government. In the past, on these occasions, I have heard successive presidents pleading for more of this, or a great deal less of that, until one felt that the poor old builders must be on their uppers. They have always, in fact, looked prosperous enough and never more so than this year. The guest of honour in the past has usually been the Minister of Works, from whom all blessings flow—indirectly—and he has not always had an overwhelming welcome from the traditionally very full house. The building industry's relations with the Ministry of Labour have always been good and the record of the industry in labour relations, generally, is second to none.

Several of those present told me how well Mr. Pearce had carried out his duties. They were all much impressed by the way he had filled the office of president and attended to the private business which he runs personally. Mr. Pearce was able to tease the Minister for being late, and to remind him of competitions for punctuality in the past when they had both commanded heavy anti-aircraft regiments in the T.A.

PLASTICS FOR BATHS

In cold weather, if the supply of hot water is poor, I find that my morning bath is not worth having because the cast-iron bathtub takes what little heat there is in the water. I can see that this would not happen if my bath were made of Perspex. I can see, too, that if I ever wanted to move my bath, or to carry it on the roof of my car, a Perspex bath at around 38lb would be more manageable than its cast-iron cousin. If you add to this the permanent colouring of Perspex, the fact that it will not chip, and the wide range of colours, it certainly seems a very good material for the job.

The job includes sinks and washbasins. Even Imperial Chemical Industries, who make the Perspex from which these fittings are moulded, admit that Perspex scratches and that you can mark it with burning cigarettes or very hot saucepans. But for ordinary day-to-day working the material, they say, stands up

very well. I was surprised to find that eight firms are now producing baths in Perspex and as many more are making other sanitary fittings from it. The designs of the baths are straighforward and, in outline, seem to differ very little from standard metal practice. There is more variety in the sinks, and design varies from very good to clumsy. My major criticism of the material used in this way is that, in spite of specially designed timber cradles, the baths and sinks do not fit tightly or positively onto their undercarriages and creak when pressure is put on them. This gives me a feeling of insecurity and lack of solidity. It seems, however, that if I want this type of fitting I must put up with these minor inconveniences. An interesting point about the material is that if, by any chance, the shine is removed from sink or bath it can easily be put back with a buffing machine. As for long life, I was shown a coloured Perspex bath which had been in constant use for seven years, and it looked almost as good as new.

IN PRAISE OF M.1

Impressions of driving on the Motorway are hardly news any more, but I find, to my surprise, that I am not the last person in the country to have travelled on it. I have claimed for some time to be the only person in the British Isles who has not seen "Salad Days", "My Fair Lady", or "The Boy Friend". However, the subject is roads, and this time I am in favour of them for a change. The first trip is certainly very dramatic: the huge admonitory signs which make you think you are on the Continent; the feeling of being lost, for it is impossible to recognize where you are, although you know you are on familiar ground; and the huge widths of roadway give one a feeling of awe. I felt, slightly, as if I was on Tom Tiddler's ground and expected any minute that someone would rise out of the ground or come alongside and tell me I was doing something wrong.

The thing that surprised me most was to find that the road was, in fact, finished. There was not a sign of contractors' plant or buildings and everything was neat and tidy. I understand that this was so, even on opening day. Certainly there were signs of work in the service area which has still to be completed, but with this exception the road is flanked with neat green grass. Driving at about 55 m.p.h., I found that I did not dislike the bridges as much as I had disliked the pictures of them, but that does not mean that I do not wish that they were slimmer.

Much as I like the road, I thought that the central reserve was much too narrow. I would have made it twice the width. It is, for example, far less than that on the autobahns or on many of our older by-passes. No planting has yet been done, but a section of the reserve has been fitted with a five-foot-high fence of metal mesh. This may prevent dazzle, but it quite spoils the road and is, in my opinion, aesthetically quite unacceptable. I think it is important that this criticism should be aired before the fence stretches the whole length of the road.

Driving discipline seemed to me to be very good, but I found that one must watch one's mirrors very closely for fast cars coming up astern. An entirely new set of time and distance standards is required for the simple process of overtaking. The relief of not having side turnings, cross roads, parked vehicles, bicycles or pedestrians is difficult to exaggerate, and the saving of time, even on a 50-mile stretch at moderate speed, is remarkable. The road is, furthermore, hand-

some. It is galling to think that the next stretch of this is not yet even at the design stage.

B.C. FORUM 3-SMALL-BORE CENTRAL HEATING

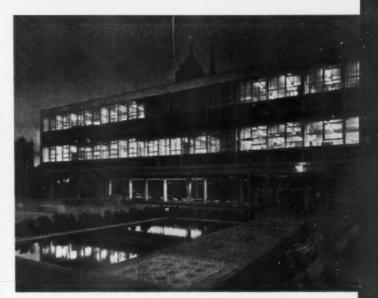
The third meeting of this season of the Building Centre Forum was attended by over a hundred interested parties. They included many architects, surveyors and heating engineers and a handful of householders. Mr. D. V. Brook, of the British Coal Utilisation Research Association, was the main speaker, supported by Mr. Peter Matthews, A.R.I.B.A. Much of the discussion centred on the pumps used in this type of system. It appears that for absolutely silent, trouble-free running, you must use one of the "canned rotor" pumps listed by B.C.U.R.A. When the system was first invented the only suitable pumps came from Switzerland; now several are made in this country. It appears, also, that some of the advertisements now appearing in the national Press give a misleading idea of the cost of this type of system, the advertisers being. for the most part, fuel merchants. The average cost of installing full central heating and a hot-water cylinder-but not services to hot-water taps-is about £350 for a house of 1.250 sq ft. This is for a solidfuel boiler of modern design.

TRADE LITERATURE AT THE BUILDING EXHIBITION

In one of my notes recently I promised to check up on manufacturers' trade literature at Olympia. In the event my plan did not quite work as I had hoped, for my emissaries, due to collect everything available, only covered the ground floor of the main halls. In all they sent me literature from 149 firms. Of these, the literature of 34 conformed to the old B.S. size of 11in by 8\square and of 14 to the new A4 size of 11\square in by 8\square in. The remaining 101 did not appear to have standardized on anything. Although this is hardly a satisfactory state of affairs it does show that progress towards standardization is being made. I find, generally speaking, that manufacturers are sympathetic towards the argument for standardized trade literature if it is put to them clearly. There is, of course, a noisy minority who "refuse to be dictated to". Even this small group will learn in time that good trade literature, produced to the size the user wants, is good business.

MONICO AFTERMATH

The general opinion among people who followed the inquiry closely seems to be that, whatever the Minister's decision, something will have to be done to prevent this kind of thing happening in this type of place in the future. The Civic Trust, which has already played such a large part in the inquiry, is not to let the matter rest. It will hold a conference in March to discuss the planning problems involved in rebuilding, as a single entity, an area in divided ownership. The conference will also consider whether some new procedure is needed to ensure that public opinion and expert advice shall be heard before planning decisions affecting sites of special importance are taken. The trust will, before the conference, circulate papers on the present state of the law, current administrative practice and the way in which this problem has been dealt with in other countries. It appears that attendance at the conference will be by invitation. Those to be invited will include local authorities and professional bodies concerned.



The new offices for Coventry city architect's department, designed by Arthur Ling, city architect, which were opened last week. Contract price: £179,278. General contractor: Garlicks Ltd.

NATIONAL HOMES WEEK

We are to have our first ever National Homes Week, from March 25 to April 2. It is to be organized by the Federation of Registered House Builders, with the blessing of the N.F.B.T.O. and with the co-operation, I understand, of other national bodies, including the R.I.B.A. and the B.C. The objects of the week are to encourage home ownership and give expert advice to the industry's customers and potential customers, to stimulate healthy competition between house builders in providing well-designed, soundly constructed houses at economic prices and to encourage manufacturers and suppliers of household goods and components to provide the widest possible choice and the fullest information to an expanding market. It seems to me, that if the federation accomplishes only a part of one of these objects it will be doing pretty well in one week. They are all very well worth while and I like particularly the use of the term "well-designed". I have thought for some time that the value of the federation would be very much enhanced if it were to insist that its members' products should be well designed. I would have made only one alteration to the list of objects. I would have made the last sentence read ".... manufacturers and suppliers of household goods and components to provide the widest possible choice of well-designed products and the fullest information. . . .

The week is to be marked by an advertising campaign in provincial newspapers and by specially organized events, including the opening of the show houses put up as a result of the R.I.B.A.-Ideal Home Small House Competition and furnished under the auspices of the C.o.I.D.

PLUS CA CHANGE . . .

". . . If you travel across Europe today, every piece of architecture from Cadiz to St. Petersburg looks as though it had come out of the same workshop." Eugene Delacroix, in his journal, March 11, 1850.

ABNER

ARCHITECTURAL EDUCATION AHEAD

JOHN SMITH

In this article, some of the conclusions of the recent B.A.S.A. report are discussed by the author, who demands "comprehensive redevelopment" for architectural education, not "make do and mend".

To those who have retained an interest in the thorny problems of architectural education and have kept a weather eye on the schools down the years, the conclusions of the recent B.A.S.A. report on education1 will have come as no surprise. The depressing overall picture of the present state of the schools contained in that report has now been known for some time. However, it is distressing to discover that the spirit of reform, that seems to animate the Board of Architectural Education's Oxford Conference Committee at the top of the educational tree, is less evident in many of the branches lower down.

Whilst the men at the top struggle to improve the general level of architectural education and the more progressive schools continue to introduce ideas and experiment to the same end, those that are more backward, of which there are still far too many, remain rooted in the past and apparently incapable of moving forward. It is unfortunate that these latter schools have taken no advantage of developments in education, widely publicized in recent years, to free themselves of some of their outworn conventions and bring themselves more up to date. It may be highly desirable that systems of education should vary, as the Oxford Conference Committee emphasizes, but there are surely limits to which the antiquated teaching methods prevalent in some schools should be tolerated.

Naturally, proposed reforms, which in spite of their apparently far-reaching nature seem designed primarily to patch up and improve an existing educational structure, will take a very long time to introduce effectively. The proposed bracing may be excellent and the remedy theoretically efficient, but will the resultant overall improvement be sufficient if some of the existing components re-used are, in themselves, unsound? Can the existing pattern of the recognized schools, for example, remembering particularly their number, geographical locations and diverse traditions, form a stable framework to an improved educational system as envisaged in the Oxford Conference Committee's report²? It is my contention that more far-reaching changes are necessary if architectural education generally is to be improved to the immediately required standard. Furthermore, the establishment of a sounder basic structure to our educational system, a structure that would lend itself to further modification and improvement, is presupposed by these more far-reaching changes. This is surely a desirable objective in itself. Although few will dispute the general findings and appraisal of the situation contained in the Oxford Conference Committee's report, both aspects of which seem basically sound and to point in the right

One Jump Ahead

For one thing it can be assumed that if the end product of an architectural education is to be an architect, primarily capable of functioning efficiently within the fabric of society and also of developing an architecture to serve the needs of that society, then it will be necessary for him to be equipped, not only as a leader of the "Building Team" (either amorphous, as at present, or more clearly and rigidly defined), but also as a potential leader within his own profession. For, to an increasing extent, leadership in the development of architecture will devolve onto the younger generation, as it does in other fields, notably that of scientific research. It seems imperative, therefore, if architects in the future are to retain their leadership in

direction, in other aspects further comment is necessary.

building, for new recruits to find themselves on qualifi-cation preferably one jump ahead of even their more progressive professional colleagues rather than one or several jumps behind.

That this ideal will be difficult to achieve cannot be denied; nevertheless it is one that must be aimed at constantly. The schools themselves must remain in the forefront of our developing architecture; playing an important part in moulding that development; becoming true teaching laboratories; and carrying out an increasing amount of advanced building research.

This could be achieved if the facilities within the schools were radically improved. For example, if working facilities were available on a sufficiently generous scale, architects of the calibre required would be attracted to work in the schools, where they could be affiliated to the teaching staff, undertaking specific research programmes as well as their own routine architectural work; their operations would be studied by those learning (as in a teaching hospital) and the work of the students themselves could more readily be integrated with "live" projects of the appropriate scale. Similarly, special research and development programmes, of benefit to the community at large, could be undertaken in a manner hitherto impossible, and this would further confirm the importance of the schools in the progress of architecture.

The Right Environment a Necessity

It is also most important that architectural schools should be closely linked with educational centres providing courses in other disciplines. This has been confirmed by the Oxford Conference Committee, but whilst it is true that many of the existing schools are within colleges and institutions providing a wide variety of courses, all to often these courses are in no way integrated or comple-mentary to each other, and the various departments concerned function in total isolation, even when estab-lished within the same building. The ideas of those responsible for governing these institutions, as well as of those in charge of individual departments, will need to be revised completely if reforms, leading to beneficial integration and mutual co-operation, are to be effectively introduced. Where the obstacles to this happening are too great, then existing architectural schools in these circumstances should perhaps be closed down or amalgamated with others in a more fortunate position.

Ideally, I believe an architectural school requires to be associated with four complementary cultural elements: it needs to face and have close contact with the professions and industry involved in architecture; it requires the moral backing and intellectual stimulation provided by a university; and it needs to maintain and to be at least partially integrated with institutions providing the whole range of art education on the one hand, and with those covering technology and the building sciences on the other. Given these four elements, an educational environment could be provided conducive to the preparation of students for a valid life in architecture and its kindred arts and sciences.

Of course, a certain bias in any one direction would naturally develop in each school according to particular circumstances, but this does not invalidate the suggestion; it would lead to an element of variety between the schools, in itself a desirable development. But if any one of the four elements I have mentioned were to be missing entirely, then a serious loss of balance would result, com-

¹ See A. & B.N., January 20, 1960. 2 See A. & B.N., November 18, 1959

parable to that existing in far too many of our schools today.

Now it will be obvious that there are few, if any, places where the four elements already co-exist with an archi-tectural school (which may form a part of any one element), and for this reason I believe it will be necessary to close down (by means of withdrawing recognition) many of our existing schools in less fortunate provincial centres, where these essential environmental and cultural background facilities are largely or entirely missing. I believe it to be fundamental to the desired improvement of architectural education that in determining where a school should be situated, the considerations of the existence of an adequate cultural background, together with those of geographical location and population, should take precedence over the fact that a school exists already. After all, there is nothing really sacred about the existing pattern of our schools; certainly no reasons why they should be preserved at all costs, other than purely sentimental ones.

The Number and Size of Schools

An indication that a reduction in the number of recognized schools may be necessary anyway, when the effects of raising the standard of entry are felt, can be detected in the Oxford Conference Committee's statistics showing the anticipated intake into the profession over

the next 35 years.

If the annual intake figure of 500, as given in the report, is accepted, and assuming, for the purposes of argument, that a five-year, full-time course will be maintained (the two years' "office" experience can here be discounted), the number of students within the schools due to qualify ultimately will be $500 \times 5 = 2,500$. If to this figure a high wastage factor of, say, 20 per cent is added, the total student population within our schools at any one time will be approximately 3,000. Meanwhile, the recognized schools at present number 28 and if the current policy is pursued it can be expected that one or two more of the existing listed schools will also be recognized. Assuming that the final total of recognized schools is, say, 30, and that the students are distributed evenly between these schools, each will contain about 100 students. The number of students in the fifth year in each school will average 15.

Although I do not advocate that the schools need necessarily be all the same size, it will surely be essential to maintain the numbers of students in each to a certain minimum level, below which a school would cease to function efficiently for economic, as well as educational,

reasons.

Many people may consider the average of 100 students per school cited as being perfectly satisfactory if not ideal, but it may, in fact, be necessary to increase this average to something like 200 to 250 per school if the full facilities seem to be essential (notably in terms of high quality teaching staff, accommodation and equipment) are to be provided in each school. This would reduce the number of schools required to between 12 and 15 by the time the 500-intake level became static. Such a reduction would allow greater concentration of our educational resources, in contrast to the way in which they are dispersed, somewhat wastefully, at the present time.

It is to be expected that any proposal to reduce the number of schools will be resisted by perhaps the majority of the existing schools, who will quite naturally be fearful of their own extinction or of amalgamation with other (and possibly rival) institutions. But petty objections of this nature, however understandable, must not be allowed to stand in the way of essential reform. Probably such resistance could be effectively overcome if the amendments to the constitution of the Board of Architectural Education proposed by the Oxford Conference Committee are carried out. These would transform the present board, a large and somewhat unwieldy representative body, into an advisory council, and would establish a new and smaller executive board, consisting of only 12 to 15 members. This particular reform would seem a most timely one.

There are, of course, many other aspects of architectural education that have not been touched upon here. of them, like that of the controversial issue of the "twotiered" profession, with its spectre of the terrible twins Architechnologist and Architechnician, have been excluded deliberately. For our chief concern at present must be with the training of better architects, the primary function of architectural education.

If reforms are to be introduced, as seems inevitable, then let them be bold and sweeping. The slogan for education must now be "comprehensive redevelopment", as it is elsewhere, and not again the old "make do and mend".

Coming Events

Royal Institute of British Architects
February 16, at 6 p.m. "Freedom in Lighting Design", by
R. G. Hopkinson, Ph.D., B.SC.(ENG.), and John Bickerdike A.R.I.B.A.

Architectural Association
February 4, at 6.15 p.m., buffet 5.45 p.m. Informal talk by an education officer and an architect on the L.C.C. secondary schools to be visited on February 6.

February 6, at 9.30 a.m. Visit to two large contrasting L.C.C. secondary schools, Kingsdale, at Dulwich, and Garratt Green, at Wandsworth (architects: Hubert Bennett, architect to the L.C.C. Michael Powell, schools dept., G. F. Horsfall, assistant schools architect). Coach tickets 4s each.

The Polytechnic

February 4, from 6.30 p.m. to 8.30 p.m., at Regent Street. Lecture on "Space Structures—Modern Trends and Developments", by Z. S. Makowski, Ph.D., DIP.ING., D.I.C. (Imperial College of Science and Technology).

The Building Centre

February 10, at 12.45 p.m. Lunch-time film show, "Motorway" (the building of the first section of M1), John Laing & Son Ltd., and "Laingspan" (a new concrete constructional partners)

January 21 to February 12 inclusive, from 9.30 a.m. to 5 p.m. Saturdays until 1 p.m. The Corby Civic Centre

Competition will be on exhibition.

Ministry of Works

February 4, Bognor Regis, at 7.15 p.m., at the Technical Institute, Southway. "Developments in Paint and Painting", by B. Butler, director, Leyland Paint & Varnish Co. Ltd.

February 4, Cheltenham, at 7.15 p.m., at North Gloucester-shire Technical College. The Park. "Maintenance of Buildings", by F. T. Griffiths, M.I.MUN., B.M., Cannock Urban District Council.

February 9, Dundee, at 7.15 p.m., at Royal Hotel. "Design and Cost of High Flats", by T. L. Knight, A.R.I.B.A., A.A.DIP., Building Research Station, department of scientific and industrial research.

dustrial research.
February 10, at Huddersfield, at 7 p.m., at College of echnology. "Glued Timber Laminations", by W. A. Chugg, Technology.

Timber Development Association.

February 10, at Westminster, at 6.30 p.m., at the Royal Institution of Chartered Surveyors, 12 Great George Street, S.W.1. Discussion on "Cost Consequences of Co-ordinated Dimensions", by J. Barratt, M.I.C.E., Concrete Ltd. H. J. Crookshapk, S.I.O.B., Gilbert Ash Ltd., and W. A. Allen, B.ARCH., A.R.I.B.A., Building Research Station.

Cement and Concrete Association

Yorkshire and Lincolnshire Branch.
February 4, at 7 p.m., at the Adelphi Hotel, Micklegate.
"The London to Yorkshire Motorway", by M. May, A.M.L.C.E.,
to the Institution of Highway Engineers.

East Midlands Local Association
February 4, at 5.45 p.m., at the Electricity Showrooms,
Leicester. "Some Recent Advances in the Manufacture of
Large Prestressed Concrete Units", by J. H. Vince, A.M.L.C.E.,

to the Institution of Civil Engineers.

February 5, at 5.30 p.m., at the Institution of Structural Engineers, 11 Upper Belgrave Street, London, S.W.1. "Some Modern Developments in Highway Bridge Design", by C. S. Chettoe, B.SC., M.I.C.E., to the Institution of Highway Engineers.

NEWS

Architectural Competition for New Hospital at Boston, Lincolnshire

The Sheffield Regional Hospital Board will shortly invite architects resident in Great Britain, Northern Ireland and Eire to take part in an open competition, approved by the R.I.B.A., for designs for a new hospital of some 470 beds to be erected at Boston, Lincolnshire. The advertisement is likely to be issued towards the end of February.

The board has already appointed Mr. John Murray

Easton, F.R.I.B.A., as the assessor.

The competition will be conducted in two stages, the preliminary stage to comprise sketch plans showing the general lay-out, massing and composition of the scheme. From the competitors taking part in the preliminary stage, the assessor will select six to prepare more detailed schemes for the final stage.

Each of these six selected competitors will receive a premium of £500, and the author of the winning design finally chosen will, in addition, be awarded a further pre-

mium of £1,500.

Workshop Design Competition for Architectural Students

The Warwickshire Rural Community Council's Rural Industries Committee have organized this competition to stimulate and improve the design of workshops and small factories for light industry situated in small country towns and villages. The building is to be suitable for a light industry employing up to 20 people and should not cost more than £7,000.

Prizes will be: first, £50; second, £25; third, £10. Judges: J. Cosmo Clark, C.B.E., director R.I.B., J. M. Knowles. F.R.I.B.A., A.M.T.P.I., and Eric Davies, A.R.I.B.A., A.M.T.P.I.

The R.I.B.A. have been consulted and the competition

is open to students R.I.B.A. or students attending recog-

nized schools of architecture.

Students wishing to enter for the competition should complete an entry form to obtain his competition number. Entry form and further particulars may be obtained from: Competition secretary, Warwickshire Rural Community Council, Midland Bank Chambers, 126 The Parade, Leamington Spa.

Bernard Webb Studentship Award

The Bernard Webb Studentship for the historical and critical study of architecture, which is open to members of the Architectural Association and tenable under the auspices of the British School at Rome, has been awarded to Mr. Anthony J. Wylson, A.R.I.B.A., A.A.DIP., for a study of the relationship of traditional craftsmanship and industrial techniques in the development of Italian architecture as from the turn of the century.

New Deputy Chairman, Basildon

Sir John Macpherson, G.C.M.G., has been appointed to succeed Mr. Charles Bowver as deputy chairman of the Basildon New Town Development Corporation. Sir John Macpherson was for some years Governor of Nigeria. and was until recently Permanent Under-Secretary of State for the Colonies.

C.o.I.D. Wins International Design Award

The Council of Industrial Design has been awarded the Grand Prix La Rinascente Compasso d'Oro (the Great International Golden Compasses Award) for 1959, an international prize, given by the largest department store in Italy, La Rinascente, for an outstanding achievement

in industrial design in any part of the world. The Golden Compasses symbolize the "golden mean" of proportion.

Minister Relaxes Advertisement Regulations

Mr. Henry Brooke, Minister of Housing and Local overnment, has laid before Parliament regulations giving local planning authorities wider discretion to consent to the display of certain necessary kinds of advertisement in areas where advertising is limited by regulation on the grounds of amenity.

Existing limitations in special control areas have sometimes deterred planning authorities from seeking to apply special control. The Minister hopes that the wider discretion now proposed will enable special control to be applied over most of the open countryside and in other

places worthy of this protection.

One important effect of the amending regulations, which comes into force on March 1, is that, in areas of special control, planning authorities will be able to consent to certain necessary directional and other signs which hitherto could not be permitted or could only be permitted if there was a special reason. An example of this is a small fingerpost indicating the way to a golf course off the beaten track. At present this could not be permitted, but when the amending regulations come into operation consent may be given where such a sign is "reasonably required"

In a circular (3/60), Mr. Brooke asks local planning authorities to consider all areas likely to be appropriate for special control with a view to making the necessary orders. He also asks them to review, at five-year intervals, the boundaries of such areas already in force, and to consider whether control is still reasonable in areas which in the meantime have become commercial or industrial.

"In the Minister's view," says the circular, "advertise-ment control should be directed at securing that advertisements are displayed in the right way and in the right places, but not otherwise. He has been impressed by the progress which has been made in recent years, but he thinks that a great deal remains to be done. This is not a question solely for action by local authorities. It must be for the advertisers themselves to play a major part in developing techniques, improving standards, and measuring potential and existing sites in terms of amenity as well as trade.'

The new regulations also simplify and improve some of the procedures of advertisement control, including the procedure for challenging by the local authorities and for securing the removal of an advertisement if consent is refused following challenge. They increase the normal period for which consent may be given from three to five years and they make a few other amendments stemming from experience in administration over the past few years.

The new regulations need to be read in conjunction with regulations made in 1948, 1949 and 1951. The Minister hopes, in the near future, to consolidate the regulations.

A Voluntary Code For Advertisements Outdoors

A voluntary code of standards for advertising on business premises will be published in the middle of March to become effective on April 1.

A consultative committee to administer the code has been set up under the auspices of the Advertising Association. Its chairman will be the Rt. Hon. Lord Luke.

The idea of a voluntary code to prevent "clutter" as an alternative to strict regulations was submitted to the Minister of H. & L.G. by the Outdoor Advertising Industry Advisory Committee (O.A.I.A.C.). The Minister has now said he is sure that it is a step in the right direction and he will be glad to contribute a foreword

Under the Town and Country Planning (Control of Advertisements) Regulations, 1948, it is permissible to put up many non-illuminated advertisements on shops and business premises without obtaining the prior consent of the local planning authority. It is these advertisements that can cause the "clutter" which the code is carefully

designed to cure.

The sponsoring bodies to the consultative committee hope that the code when published will be widely adopted by trade associations and individual users of advertising on business premises. They will also welcome the support and co-operation of all local planning authorities and their appropriate associations in helping to make the code a success.

The first meeting of the consultative committee took place on Friday, January 29. An executive committee is to be formed and the name of its chairman, together with the names of members of both committees, will be announced later.

I.A.A.S. Office Bearers

Councillor W. J. Clark, F.I.A.S., F.R.S.A., M.R.S.H., has been elected president of the Incorporated Association of Architects and Surveyors for 1960. Mr. Clark, who is now with the Materials and Information Group of the L.C.C. architect's department, and previously had four years' experience as a building surveyor on building regulation and town planning work, has held numerous

B.S.I. committee appointments. He was Mayor of the Borough of Epsom and Ewell during 1956-57.

Other office bearers appointed are: Mr. P. Russell Walker, as senior vice-president and president elect; Mr. A. C. Williamson was elected chairman of council, and Mr. S. R. Nevell, vice-chairman of council. The newly elected vice-presidents are: Mr. S. R. Nevell and Mr. R. Mealings. Mr. A. C. Williamson was elected hon. secretary and Mr. S. R. Nevell was elected hon. treasurer.

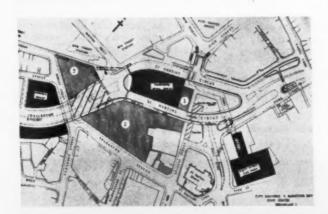
The R.I.B.A. Prizes for Public and Secondary Schools

The R.I.B.A. offers annually for competition between boys and girls in public and secondary schools prizes totalling 20 guineas in value, for the encouragement of interest in architecture. The jury for this year's prizes will be: F. E. Green, Michael Ryan, Peter Shepheard, and Richard H. Sheppard, critic.

The competition is not open to those who have left school before the end of the summer term immediately preceding the closing date for entries. Further particulars from: The Secretary, R.I.B.A., 66 Portland Place, London,

W.I

DEVELOPMENT FOR THE BIRMINGHAM BULL RING CENTRE



A £5-million scheme for the comprehensive redevelopment of an area of more than three acres in the Bull Ring and retail market area of Birmingham has been approved in principle by the Public Works Committee of the City Council. This scheme has been submitted by the Laing Investment Company Ltd., and construction will be undertaken by John Laing & Son Ltd.

The perspective impression may be related to the site plan on the left. Development areas are: (1) One of the main access points with shops and above them a children's nursery. (2) A central retail market and two levels of shops with a departmental store. The provision of restaurants and a news theatre is under consideration. An omnibus station and car-parking facilities for 625 cars is also included in this area. (3) This area, which is linked at high level with the main scheme (2), is expected to consist of a departmental store, with shops along the access at high level. It is anticipated that clearance work wil Istart shortly, with completion of the entire scheme by March, 1963.



COMPETITION FOR SHOPFRONT DESIGNS

Result of the competition sponsored by the Glass Benders' Association

This week we publish the remaining prize-winning schemes in the competition for shopfront designs (a first scheme in the section for the design of a small shop front was published on January 20). Submitted designs will be on show at the Building Centre until Saturday, February 6.

ASSESSORS' REPORT

*HE general standard of the designs submitted was disappointingly low and, considering the wide freedom allowed to the

THE general standard of the designs of the competitors, few fresh ideas were forthcoming.

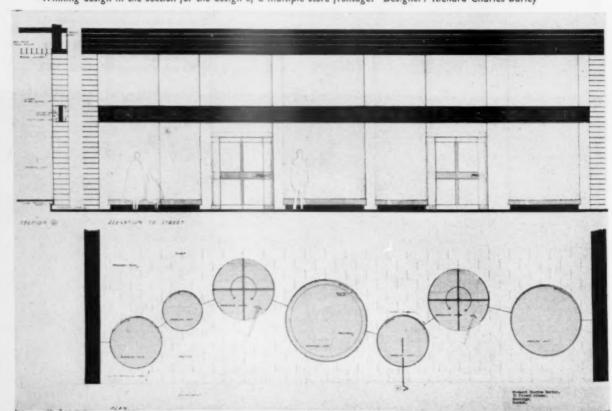
All the more successful workable schemes fall into two categories—(a) the cylindrical glass window; (b) the horizontal and the latter only one (that awarded third prize in Section A, Small Shop Front) made any non-reflecting curve window; and of the latter only one (that awarded third prize in Section A, Small Shop Front) made any original contribution. Both the winning designs, in different but appropriate ways, made a bolder and more original use of the cylindrical window idea than any other design submitted.

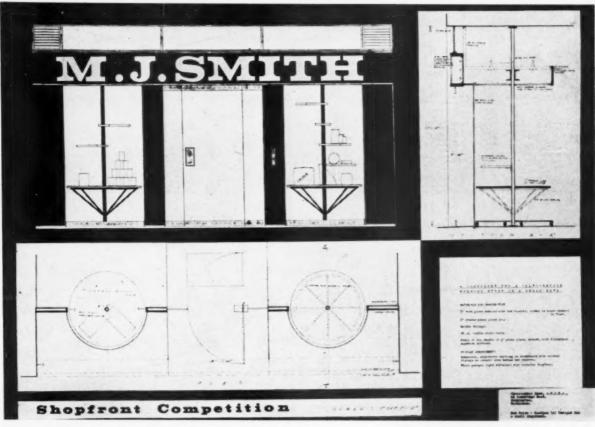
Leonard Daniels, in his winning design for the small shop front, (see page 77, A. & B.N., January 20, 1960) achieved, a considerable and flexible display area and an attractive design without appearing to crowd or restrict the shop. The ceiling of the display area is perhaps a little lower than desirable and in its present form the window presents internal cleaning problems; but these could be easily overcome and, as Mr. Daniels suggests in his report, the idea has the possibility of many variations. The second design in this section, by Christopher Read (page 151), also makes use of the cylindrical display window intelligently and with taste, but without the same boldness. The design placed third in this section, by David White (page 151), was, as has been already mentioned, the only one to make real use of the traditional non-reflecting window.

Section B. The Larger Shop Front. The selection of the winning designs was less obvious in this section, but the assessors are unanimous in their opinion that the design by Richard Burley, with its bold and simple use of glass cylindrical windows, should be awarded first prize (below). Many competitors put forward this idea but none achieved so clear a statement with such an economic use of space. There are technical difficulties in achieving these cylinders, but to overcome these would in no way detract from the design. The design by Messrs. Vane and Baker, placed second, (page 152), is an attractive plan, but it does not make any original use of bent glass. By certain simplifications, for example dressing the island showcase from the solid ends rather than from the sliding show windows, this scheme would achieve greater economy. The design by Leonard Daniels, the winner of the small shop section, which was placed third (page 153), has the merit of a simple, good idea. The assessors are not entirely convinced that Mr. Daniels' method of cleaning his cylindrical windows would work, and regret that he has not made use of bent glass elsewhere.

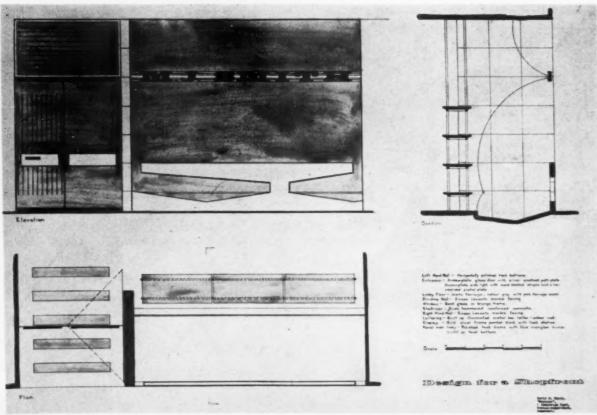
There were 28 entries for the small shop front and 26 for the large shop front. Some entries failed to comply with the conditions laid down and were eliminated.

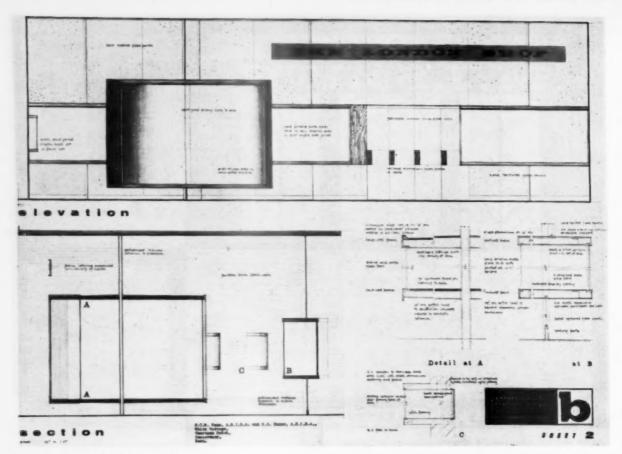
Winning design in the section for the design of a multiple store frontage. Designer: Richard Charles Burley





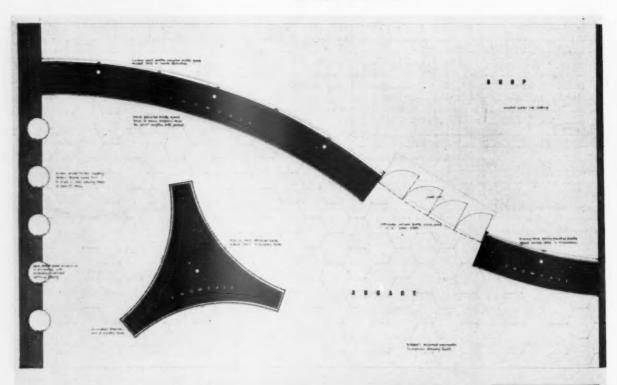
Above, second prize-winning scheme in the section for the design of a small shop front. Architect: Christopher Read (first prize illustrated on page 77 A. & B.N. 20/1/60). Below, the third prize-winning scheme in the same section. Designer: David H. White





COMPETITION FOR SHOPFRONT DESIGNS

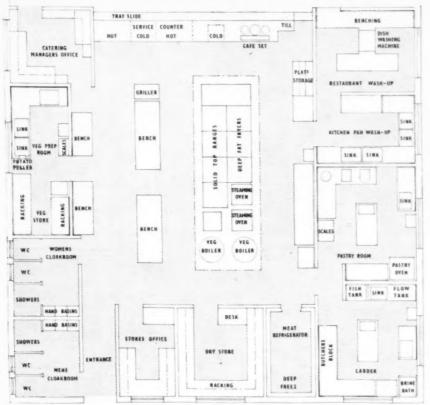
Above and below, second prize-winning scheme in the section for the design of a multiple store frontage. Architects: D. C. W. Vane and G. D. Baker.





D.C.s. Vaces, N.A.J.S.A. and Q.S. Sminer,A.S.S.A.A., Marin Sellings, Charleston, Sellings, Section Sellings,



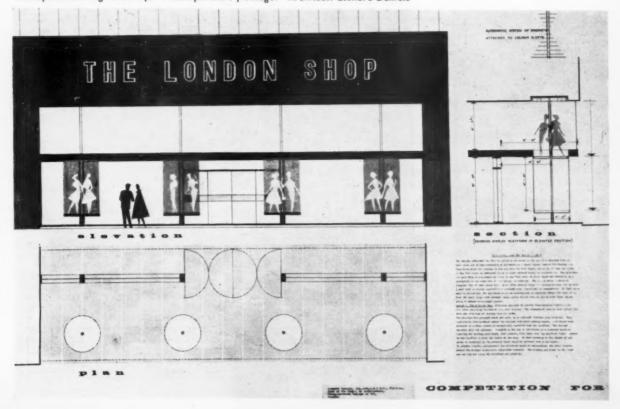


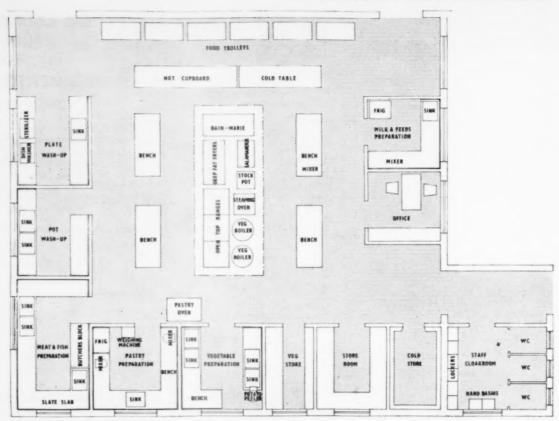
GAS COUNCIL "PLAN A KITCHEN" COMPETITION

On this page and the following page we illustrate some of the prize-winning designs. The assessors comprised Madame S. B. Prunier, Mr. H. R. Duffield-Harding and Mr. P. H. Venning.

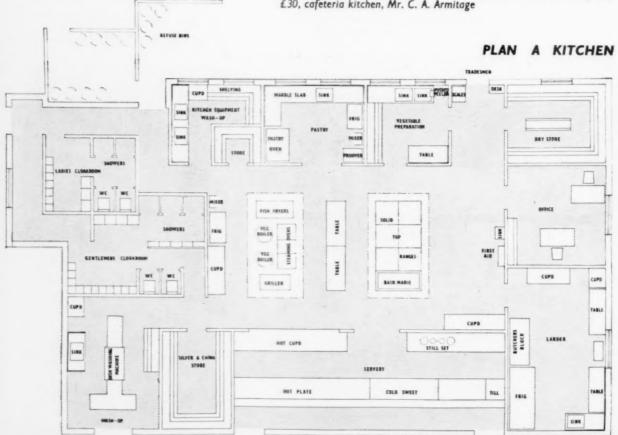
First prize, £50, restaurant kitchen, Miss G. M. Grant

Third prize-winning scheme for a multiple store frontage. Architect: Leonard Daniels





Third prize, £20, hospital kitchen, Miss T. Tuffin. Below, second prize, £30, cafeteria kitchen, Mr. C. A. Armitage



THE ARCHITECT and Building News, 3 February 1960

MULTI-STOREY CAR PARKS

In this feature we show two car parks: the Pearce Autopark, completed some time ago in Birmingham, and some details of a project of a new mechanical car park, the first to be built in London



The Pearce Autopark operates on the principle of using lifts and trolleys to park the cars. This uses up far less space than ramps and is thought to be much cheaper in the long run. Above, the front of the Pearce Autopark Building, Birmingham. Below, pictures showing how the autopark operates

THE PEARCE AUTOPARK

MR. R. S. PEARCE spoke recently in Sheffield about the Pearce Autopark: local authorities should build multi-storey car parks and allow private enterprise to operate them, paying the civic authorities a rental based on long-term interest rates.

Mr. Pearce preferred lifts to ramps because the park with a lift required less space, and provided a means of reaching higher floors quicker than by the ramp system, and there were no wide gangways required. Where a car was driven inside a building each one must be provided with a space at least 8ft wide and 16 to 18ft long to allow for doors to be opened. and driving. But in the Pearce system these drawbacks were overcome by the use of lifts and trollies. hand-operated and on roller bearings from which the car is pushed straight on to its parking space. The customer, on arriving at the reception centre, is given his ticket and from that time the engine is never used again until he collects the car to depart. The car is pushed to the lift, and taken to the higher floor, and an attendant moves it into place, and meantime the lift has returned to the ground floor for its next car. The number of lifts to be installed can be decided on the size of the garage, but it was important that they could serve all floors.

Because cars had not to be manoeuvred on the parking floors there was obviously a great saving of space, and the accident risk is reduced to a minimum. Manpower economy is affected by not having all floors fully manned through the opening period, but a simple system of

GOING UP

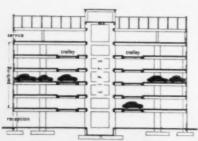


COMING DOWN

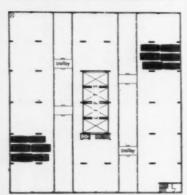


coloured lights controls the personnel and lifts, and enables both to be located immediately. The four lifts in the building can easily deal with 250 cars an hour, and delays are most unusual. Services can be offered such as petrol, washing, polishing, greasing and minor repairs if thought to be necessary to add to the income of the autopark. The Birmingham building cost about £45,000, or under £250 per car space. This includes lifts, trollies, lighting, drainage, etc., and though building costs had increased in the past two years, the cost should not be more than £300 per car space, unless there were unusual site difficulties. Parking fees averaged at 5s for nine hours.

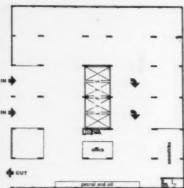
Birmingham has shown that customers will pay reasonable charges.



CROSS SECTION (service floor will accommodate 60 cars



UPPER FLOOR -- FIVE THUS (parking 92 cars per floor)



GROUND FLOOR (reception, and also parking for 30 big care)



Above, a perspective of the new car park to be built in Shoe Lane. Below, the car-lift which will be used instead of the more familiar ramps

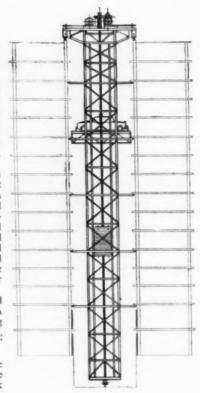
WHAT may well be the first mechanical car park to be operated in London will be built on a site in Shoe Lane, near Holborn Circus, in the City, with an associated office building. The development is being undertaken by Parcar Ltd., a company owned jointly by Mitchell Engineering Ltd., of London and Peterborough, and the Unit Construction Co. Ltd., of Feltham, Middlesex.

The mechanical car park, which will be separate from, but adjacent to, the office building, will be ten storeys high and will be equipped with two lifts, each capable of carrying two cars at a time, and cars will be moved from the lift and parked by mechanical trollies. It is estimated that four cars a minute can be parked under this system. Drivers will drive into the ground floor, leaving their cars to be parked mechanically.

Accommodation will be provided on the site for about 240 cars. A petrol station, together with servicing bays, is included in the project, which will offer "round the clock" service.

The adjacent office building will be seven floors high and there will be 40,000 sq ft of office space. Work on the site is expected to begin in June, 1960, and both buildings will be completed in about 12 months there-

Developers: Parcar Ltd. Architects: Howard V. Lobb & Partners.
Surveyors: Hallet, Fox & White.
Quantity surveyors: Messrs. Gleeds.
Main contractors: Unit Construction
Co. Ltd.



CITY CAR PARK

NEW SCIENCE BUILDINGS, LIVERPOOL

- Civil Engineering
- Physics

In common with many of Britain's Universities, Liverpool has a programme of expansion which commenced after the war. Sir William Holford was appointed to advise the University authorities on their redevelopment programme. The pattern is shown in the diagram below, in which pre-war buildings are shown in outline, new buildings completed since the war in solid black and proposed buildings hatched. The original University site has been extended to include the area between the black broken line. The proposed phasing of the programme is given by the dates. Oxford Street and Brownlow Hill are to be kept as main roads running across the site. Professor Myles Wright, Professor of Civic design at Liverpool, a partner of William Holford and Partners is now consultant planner. A model of the precinct scheme is shown in the photograph on the right



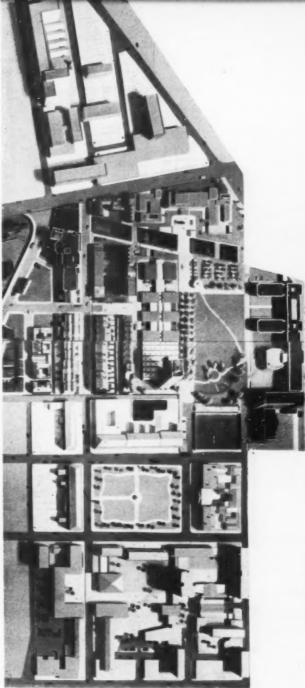
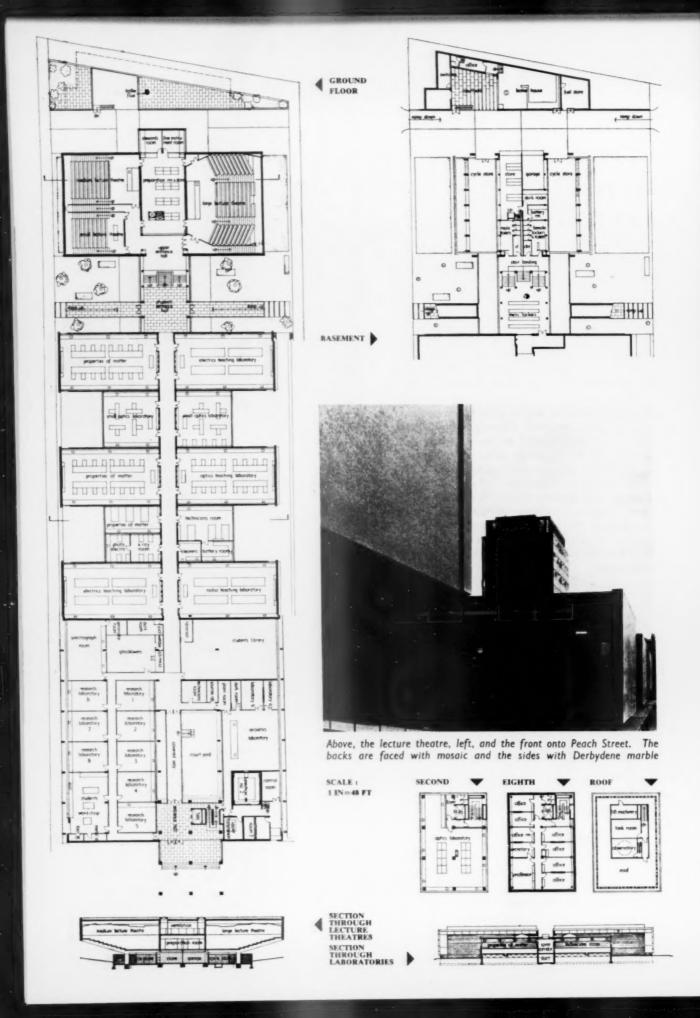


Photo: LEE

CONTRACT PRICE INFORMATION

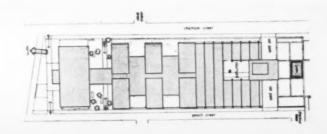
Tender
Work started
Work completed
Highest tender price
Lowest tender price
Superficial area
Cube
Foundations
Superstructure
Finishes
Installations
Total cost of job
Cost per ft super
Cost per ft cube

Physics
June 1957
August 1957
November 1959
£563,857
£494,482
87,923 sq ft
1,318,000 cu ft
14/2½d per sq ft
33/8½d
15/9d
27/6½d
£494,482
£5 7s 7½d
7/1½d



RESEARCH AND TEACHING LABORATORIES, LIVERPOOL

Architects: BASIL SPENCE and Partners
Quantity Surveyors: REYNOLDS and YOUNG
Structural Engineers: OVE ARUP and Partners
Services Engineers: A. F. MYERS and Partners





Above, the whole length of the building fronting onto Chatham Street. On the extreme right the cantilevered lecture theatres. The tower is faced with mosaic

A CCOMMODATION was provided for three lecture theatres, six large and four small teaching laboratories, one large research area for heavy equipment which could be subdivided to suit changing requirements, a library, several other laboratories for research using light equipment, areas for the study of theoretical physics and a certain amount of space for administration.

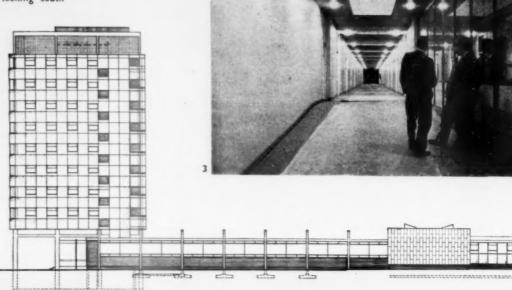
Several plan arrangements were investigated and it was found that the best solution was to adopt the principle of single-storey development for teaching, lecture theatre accommodation and heavy research

where the majority of students and post-graduates would work, with a tower building to house lighter research, administration and quiet areas for theoretical physics. This was also the most economical solution as the single-storey development could be of a load-bearing structure with a reinforced concrete tower at one end. Site conditions were unsatisfactory and therefore it was much more economical to have a concentration of piling and framed structure at one end of the site and light foundations over the rest.

The lecture theatres are positioned two on one side and one on the other



1, Lift and staircase in entrance hall. 2, Junction of covered way and tower in south courtyard. 3, The central corridor looking south



PHYSICS LABORATORIES

side of the central service-room area, cantilevered outwards, the profile following the stepped seating of the auditoriums. The roof consists of prestressed beams spanning the length of the building supporting pre-cast lightweight concrete slabs. Artificial illumination and ventilation are used in all the lecture theatres, which have acoustic ceilings and timber-lined walls. The flank reinforced concrete walls are faced with 1½in thick Derbydene marble with a honed finish, the end walls being faced in glass mosaic.

end walls being faced in glass mosaic. The students' entrance hall between the theatres and the teaching laboratories is completely glass walled, and is approached on each side by a ramp paved in Westmorland slate, which is carried through as the flooring for the hall.

Teaching Laboratories

The six large teaching laboratories are separated by four smaller areas, all single storey, constructed in load-bearing brickwork on mass concrete foundations. The ceiling is of steel lattice beams supporting steel "Ts" and woodwool slabs covered in screed and built-up felt. The beams are at 10ft centres spanning 40ft. The end walls of the large teaching laboratories are built in 13½in Derbydene. The lag side walls are in grey-brown facing bricks, which carry through to form the internal face to the smaller laboratories. Plinths are in purple brickwork.

The research laboratories are of reinforced concrete with columns and deep upstand beams at 20ft centres painted black. The walls below windows are in grey-brown brickwork with purple brick plinths. A small courtyard is situated at the base of the tower, which is paved, and has small areas of planting.

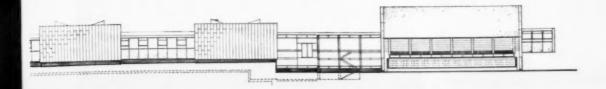
The tower is of a reinforced concrete structure with a deep beamless slab supported on columns at 20ft centres. The cladding consists of 5ft square pre-cast spandrel panels faced in glass mosaic, the exposed ground-floor columns being fairface concrete, as is the roof terrace framing.

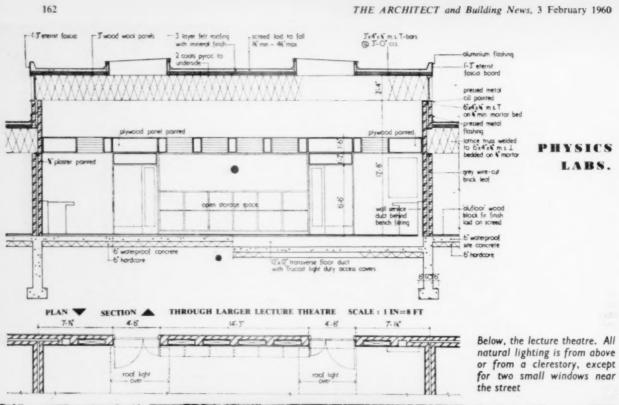
The boiler-house is separate from the main building, adjoining the railway cutting, the roof being at pavement level. The walls are faced with purple brickwork and the roof is a paved pedestrian area.



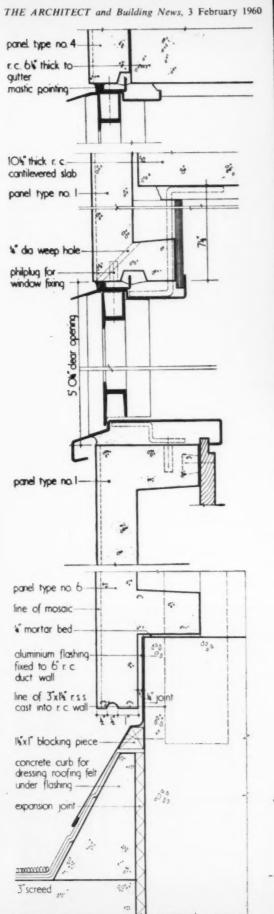
Above, north end of corridor from the entrance hall to the lecture theatres. Below, the large lecture theatre which is cantilevered outwards. The lecture theatres are illuminated and ventilated artificially





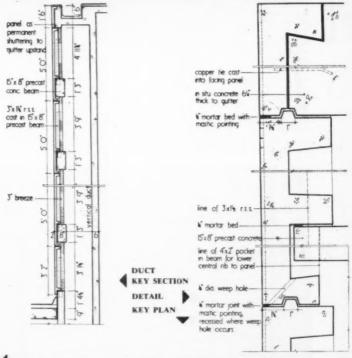




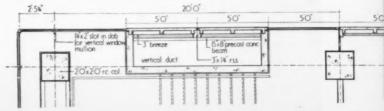


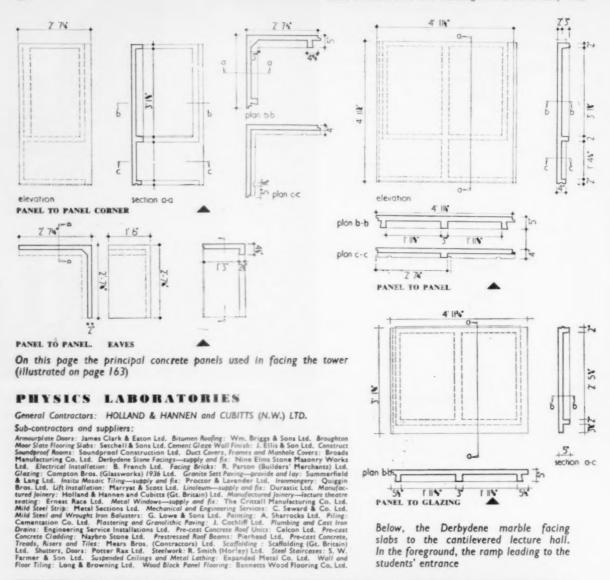


Above, the tower, the panels are faced with mosaic. Window wall details on left, sections through the vertical duct



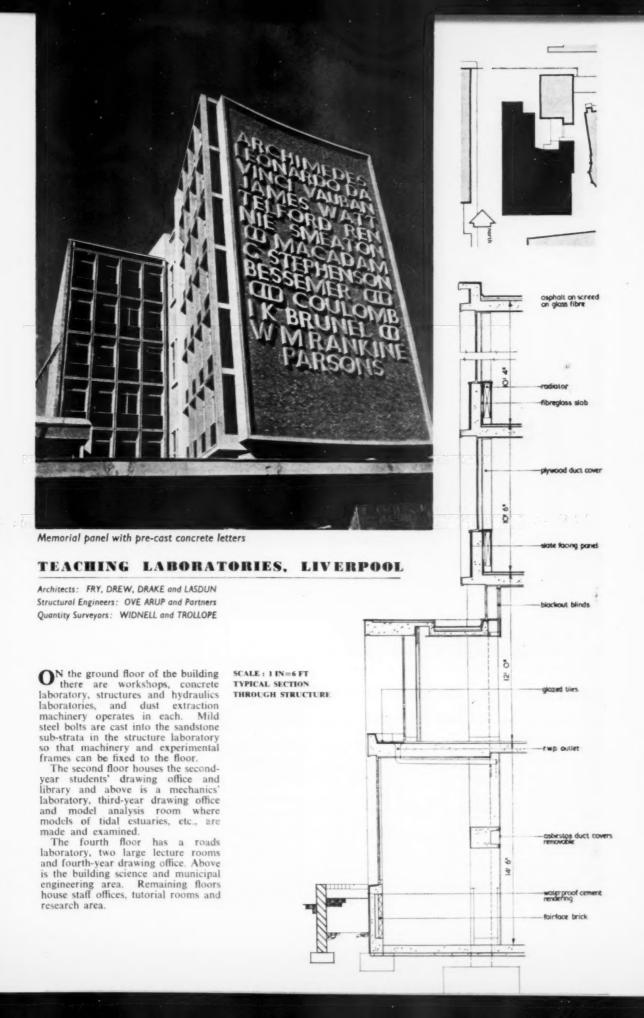
SECTION THROUGH WINDOW WALL OF TOWER SCALE: 1 IN=4 IN





Below, the Derbydene marble facing slabs to the cantilevered lecture hall. In the foreground, the ramp leading to the students' entrance









Top, porters' kiosk in entrance hall. Below, workshops

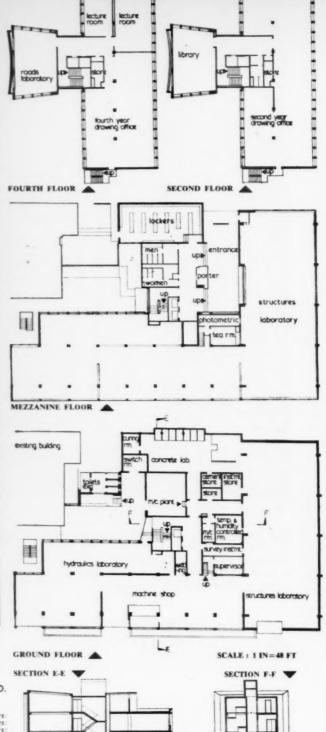
ENGINEERING LABORATORIES

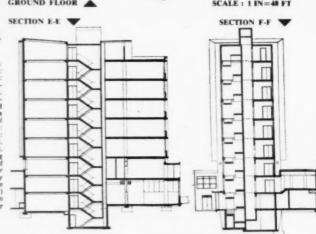
General Contractors: HOLLAND & HANNEN and CUBITTS (N.W.) LTD.

Sub-contractors and suppliers:

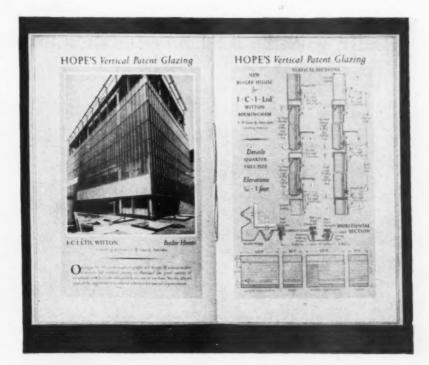
Sub-contractors and suppliers:

Aluminium Windows and Doors: Williams & Williams Ltd. Armourplate Glass Doors: Imms Gibbons Ltd. Arphalt Roofs: R. E. Cawthorns & Son. Balustrades & Railings: G. Lows & Sons Ltd. Blackout Blinds: Tidmarsh & Sons. Bin Discharge Doors: Frederick Parker Ltd. Cast Iron Drains and Plumbing: Engineering Service Installations Ltd. Concrete Roof Units: Pierhead Ltd. Decorations: Walter Wilcock Ltd. Electrical Installation: Tanjon (NiC) Ltd. External Iron Escape Staircase: Haywards Ltd. Frostproof Tiles: A. J. Tatham Ltd. Gramwood Flooring: Granwood Flooring: Compton Bros. (Glassworks) 1936 Ltd. Hardwood Joinery and Internal Fittings: Holland & Hannen and Cubitts (North Wess) Ltd. Hardwood Strip Flooring: R. W. Brookes & Co. Ltd. Headed Cellings: Clark & Front Ltd. Hologlost Partitions: Holoplast Ltd. Internal Metal Work: Spencer-Mason; Alfred G. Roberts Ltd. Linoleum and Acotile Flooring: Talbex Ltd. Merole Paving: Anselm Odling & Sons Ltd. Linoleum and Acotile Flooring: Talbex Ltd. Mechanical Services: Beightside Heating & Engineering Co. Ltd. Plasteting: J. Cothiff Ltd. Pre-cost Concrete, Exposed Ageregate, Columns and Beams: Ferroconcrete (Lancashire) Ltd. Rock Drilling for Achor Bolts: E. Timmins & Sons Ltd. Roof Waterproofing: Evode Ltd. Saiter Patitings: Adamses Ltd. Shoped Plywood Duct Covers: Renn's Shaped Piv Ltd. Slate Panels: Williams & Co. (London) Ltd. Suspe ded Cellings: Beaumonts (Manchaster) Ltd. Terrazzo W.C. Partitions and Paving: The Terrament Flooring Co. Travelling Grane and Pulley Blocks: Herbert Morris Ltd. Wall Tiling: R. A. Davison & Co. Ltd.





HOPE'S PATENT GLAZING



We believe this to be the most comprehensive and useful catalogue of Patent Glazing details yet produced. Copies available to Architects and Engineers from

HENRY HOPE & SONS LTD

Smethwick, Birmingham & 17 Berners Street, London, W.1

When it is essential to keep out water specify

ASPICATOR

Complying with British Standards and "Kite" branded with the B.S.I.'s certification mark



Asphalting a new Thames Tunnel by a member company of:

THE NATURAL ASPHALTE MINE OWNERS & MANUFACTURERS COUNCIL

14 HOWICK PLACE, LONDON S.W.1. TELEPHONE: VICTORIA 1600

* FREE technical advice and literature available from the Council at 14 Howick Place, London S.W.1. Telephone: Victoria 1600

Registered /

Trade Mark

Industrial Notes

- Wolsey Electronics Ltd., of Orpington, Kent, have appointed Mr. of B. C. Cook as technical consultant to their Vision Network Systems Division. He will advise architects and council, borough and civil engineers on their problems concerning communal aerial installations in blocks of flats and high density housing developments.
- Atlas Lighting Ltd. have commenced a lighting design course with the object of explaining the basic principles and practical application of the technical data included in the Atlas Lighting catalogue. More than 50 senior architects, consultants, electrical engineering contractors and works engineers are attending the course and lectures are being given by Mr. G. V. McNeill, a member of the company's technical staff. His talks are supplemented by practical demonstrations of Atlas equipment.
- The stand of Floor Treatments Ltd. at the Cleaning and Maintenance Exhibition which is now being held at the Old Horticultural Hall, London, is called Floor Surgery. The company offers advice to customers on how to treat problem floors, including: (a) how to treat a discoloured floor or one that has been overwaxed with spirit solvent polishes; (b) how to re-
- (i) how to treat floor areas in food production areas suffering from un-
- Works, Levenshulme, Manchester, celebrate their Jubilee during 1960.
- Mr. R. E. Feakins, production executive of H. Newsum Sons & Co. Ltd., has been appointed commercial manager.
- Sir Edmund Bedingfeld has been appointed manager of the architectural division of T. & W. Farmiloe

move build-up of soiled emulsion polish from thermoplastic floors; (c) how to treat woodblock floors for splintering; (d) how to renovate a floor surface suffering from the penetration of oil; (e) how to treat a floor suffering from surface wear, due to heavy traffic conditions; (f) how to treat canteen floors suffering from grease penetration through spillages; (g) how to treat laboratory floors suffering from deterioration through the penetration of chemicals; (h) how to treat rubber floors suffering from the surface having become perished;

hygienic conditions; (j) how to provide a shining floor surface that is not slippery, according to the type of Dowson & Mason Ltd., of Alma

Ltd. in succession to Mr. Michael Farmiloe who is now deputy sales director. Recent additions to the company's architectural representatives include Mr. A. T. C. Hazeldine (West Country), Mr. G. R. Irvine (Thames Valley area) and Mr. D. Price (London and Surrey).

- The Esso Petroleum Co. Ltd. are seeking planning permission to lay a 75-mile oil pipeline from their refinery at Fawley to a new distribution depot near London Airport. The new depot will have a storage capacity of 20 million gallons and the cost of the project is estimated at £2,500,000. All grades of light oils will be pumped direct from the refinery to this new depot from which delivery will be made by road over a wide area, including the whole of West London and in the case of aviation fuels, by separate pipelines to London Airport. The proposed pipeline will be buried to a depth of at least 3ft over the whole distance and will cross Southampton Water and carry under the River Thames. The pipeline will be all welded and protected against corrosion and will have an initial capacity of 14 million gallons a day. It is hoped to commence work this year and to complete early in 1963.
- Mr. W. H. Smith has decided to retire on March 31 from the chairmanship and from membership of the board of Allied Ironfounders Ltd. He is to be succeeded by Mr. G. S. Steven, the present vice-chairman and joint managing director, but will continue as joint managing director with Mr. H. C. Wilson Bennetts,
- T. & W. Farmiloe Ltd., makers of Nine Elms paints, have appointed Mr. H. A. J. Battam to be their representative in East Anglia.
- T. Bath & Co. Ltd. have appointed Mr. D. H. Moss as their technical manager. He will be in charge of design and development and of the company's Uni-bilt building depart-
- J. C. Bamford (Excavators) Ltd. report that the sale of their J.C.B. Hydra/Digga/Loadall machines has reached an all-time record high level. It is particularly noteworthy that Mr. Gastinger, of The Hanger Motor Co. Ltd., of Bromsgrove, sold over 50 of these machines during 1959.
- The 1960 price list of the Ruberoid Co. Ltd. has now been issued and it contains lower prices for certain of the company's lead-lined dampeourses in addition to all three weights of Starex roofing.

This suspended ceiling of curved Bowater In insulation board was recently installed in the Assembly Hall of the Springfield Secondary Modern School at Middlesbrough. Curved effect was achieved be rebating the panels from the back and inserting a timber fillet into the gap before curving. Transversely supported with wooden braces at each end, the panels were slotted to engage with sections of the BT3 concealed fixing system. Architect: Philip R. Middleton



CORRECTION

The actual constant ratings of the new Valor SA25 and SA35 oil-fired boilers are 15,000 and 30,000 B.Th.U/ hr, respectively, and not as stated in our review of these products which appeared on page 26 of A. & B.N., January 6, 1960.

NEW PRODUCTS

In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer

New Plastics Cistern

The makers of the Eterna all-white, flushing cistern, which was reviewed in these columns on December 30, 1959, are anxious to make it known that the unit complies fully with B.S.S. 1125:1959.

Fordham Pressings Ltd., Dudley Road, Wolverhampton.

Readers' Information Service, Ref. A. Date 3/2/60.

Vitreous Enamelled Architectural Panels

Namell architectural panels consist of a steel sheet onto which an inorganic vitreous enamel is fused at a temperature of 750 to 850 deg C. Three types are made: single-sheet panels, adhesive laminated panels and assembled panels. Typical uses would appear to be as building panels for curtain walling, infill panelling, wall cladding, balcony panels and panelling for shower-bath cubicles. The singlesheet panels (type 101) may be either formed or flat and can be supplied with or without insulating material. The adhesive laminated panels (type 201) consist of a vitreous enamelled panel on the exterior face with a core of insulating material backed by a galvanized metal plate. The assembled panels (type 301) consist of interior and exterior vitreous enamelled panels with flanges which are mechanically assembled; insulating material can be packed in if required. Panels are

made from 16g enamelling grade steel and can be supplied in any of the B.S.S. 2660 Munsell range of colours, in semi-matt finish as standard. The reverse side of all Namell panels has a second coat in addition to the standard ground coat. The maximum dimensions usually supplied are: 6ft long by 4ft wide, but lengths of up to 8ft can be made if required. The makers recommend an area of 12 sq ft as the most economical size. Quotations for special designs of panels will be given to architects. All panel edges are sealed with water-proof tape.

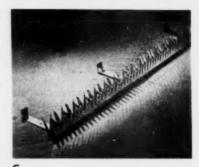
National Enamels Ltd., 53 Norman Road, Greenwich, London, S.E.10. Greenwich 2266.

Readers' Information Service, Ref. B. Date 3/2/60

Bird Nuisance Preventer

The Harvey Bird Baffle has been designed with a view to preventing the nuisance, and its resultant disfigurement and damage, caused by birds alighting on important buildings and flats. Unobtrusive and easily fixed, the baffle is produced in 20g aluminium and is of gutter section with rows of blunt projections formed to carefully determined angles. It may be fitted to follow the lines of cornices and other architectural features, and is secured by means of metal straps which can be fixed to any adjoining surface. The fittings





are of weather resisting alloy and are devised to allow rainwater to drain away. The bird baffle is produced in 8ft lengths and a 4ft length of lin wide 18g aluminium fixing strap is supplied with each length. The strap, which can be easily cut and bent to the required size, has holes at intervals for the dual purpose of fixing to window cills and ledges and for the assembly of extra baffles if necessary. Price: 2s 3d per ft (additional fixing strap costs 1s 1d per 4ft length.

G. A. Harvey & Co. (London) Ltd., Woolwich Road, London, S.E. 7. Greenwich 3232.

Readers' Information Service, Ref. C. Date 3/2/60,

Mobile Automatic Electric Washing Machine (D)

The Liberator is the name given to the first mobile fully automatic washing machine to be developed in Britain. The machine has a 6/7lb dry weight capacity and will heat the water, wash, rinse four times in fresh water, spin dry and then switch itself off. An interesting feature is a builtin six-wash programme which ensures the right wash treatment for virtually all fabrics, from cottons to the latest synthetic materials. The control panel contains a thumb wheel on the left which operates the adjoining wash programme selector, with a control dial on the right of it which should be pushed in to start the machine. Permanent plumbing is not necessary for a special tap adaptor is provided for connection to the cold water supply. The water is automatically heated by a built-in 2.75kW immersion heater, but a hot water hose is supplied if it is desired to connect to the household hot water system or to have the installation permanently plumbed. The cabinet is of welded rustproofed sheet steel, and the appliance is fully mobile on a castor base. Adjustable screws in the base of the cabinet allow the machine to stand level on uneven floors. The door frame is a solid die casting with polished chromium-plated rim and the inset window is of thick heat-resisting glass incorporating a soap port so that detergent can be added after the machine is filled with water. door handle can be removed for safety purposes. Automatic emptying





The only drainage system for sites like this

Squelching round a waterlogged site at least makes you thankful that you specified pitch fibre pipes. Drain-laying goes on regardless of rain or frost, keeping your progress schedule up to date. That's when you bless those simple, precision joints that need not wait on the weather. There are so many good reasons for specifying pitch fibre pipes. May we remind you of seven?

Pitch Fibre Pipes

SEVEN reasons why pitch fibre pipes cut your costs

- Laying, testing and backfilling are simple and swfft—rates up to 500 ft. an hour can be achieved with semi-skilled labour
- · Concrete and cement joints are unnecessary
- Schedules can be maintained regardless of weather conditions
- Pitch fibre pipes are light, non-brittle and precision made to 85 2760
- · Wastage caused by breakages on site is drastically reduced
- Corrosion, root penetration, water infiltration and cracking through settlement are all eliminated
- Improved hydraulic flow makes flatter gradients possible

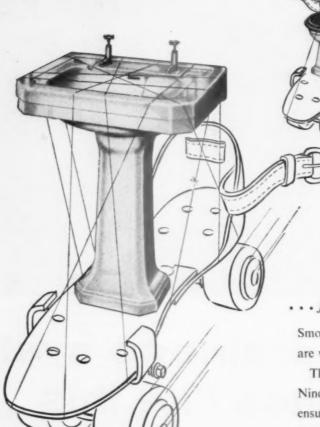
Write for advice to: The Secretary, P.F.P.A., 27 Chancery Lane London WC2 · Telephone Chancery 6001

ISSUED BY THE PITCH FIBRE PIPE ASSOCIATION OF GREAT BRITAIN THE KEY ENGINEERING CO LTD . TEMPLE TUBES . UNION FIBRE PIPES (GREAT BRITAIN) LTD



EASTWOODS keep your programme up to schedule ...

... sanitary supplies with skates on ...



... faster than ever delivery ...

Smooth running construction programmes are vital to the Building Industry.

That's where Eastwoods can help you! Nineteen Depots giving a wide coverage ensure the instant availability of top grade sanitary ware.

How to start the wheels turning? Simple—a 'phone call to Eastwoods.

EASTWOODS SALES LIMITED

Eastwood House, 158-160 City Road, London, E.C.1 Telephone: Clerkenwell 2040 (30 lines)

Or to: Northern Sales Office, 39 Thorne Road, Doncaster. Telephone: Doncaster 49256

Or ony of eur depots: CAMBRIDGE, 117 East Road, Tel: Cambridge 2087/55514; COVENTRY, Sandy Lane, Tel: Coventry 61707/40058; DONCASTER, Crompton Road. Tel: Doncaster 61442; EASTLEIGH, Allbrook, Eastleigh, Hants, Tel: Eastleigh 2621/2; GILLINGHAM (Kent), Trafalgar Street, Tel: Gillingham 51088/9; GREENWICH, Norman Road, S.E.10, Tel: GREEnwich 1172/3; HILLINGDON, Uxbridge Road, Tel: Uxbridge 6421/2; IPSWICH, Cumberland Street, Tel: Ipswich 53794/5; ISLEWORTH, 11 The Square, Tel: Isleworth 2271/2; KINGSLAND, 4 Orsman Road, N.I., Tel: SHOreditch 4133/4; KING'S LYNN, South Everard Street, Tel: King's Lynn 3718; LEEDS 7, 320 Meanwood Road, Tel: Leeds 40484; LETCHWORTH, Birds Hill, Tel: Letchworth 1700; MORTLAKE, High Street, S.W.14, Tel: PROSpect 7231/2/3; NORWICH, Rosary Road, Tel: Norwich 21498; SOUTHEND-ON-SEA, Fairfax Drive, Southend, Essex, Tel: Southend 48171/2; SUDBURY (Suffolk), North Street. Tel: Sudbury 2895/6; WEMBLEY, St. John's Road, Tel: WEMbley 5404/5; WEYBRIDGE, Bridge Wharf, Tel: Weybridge 3963.

NEW PRODUCTS (continued)

takes place through a drain hose which can be hooked over the rim of the sink. The standard motor is of the \(\frac{1}{2}h.p. \) single-phase capacitor start induction type. The drum rotates at 60 r.p.m. when washing and at 500 r.p.m. when spin drying. A seventh dialling position is provided on the control panel so that the Liberator can be used as a spindryer only if required. Voltage range: 200/240V A.C. Overall dimensions: 25in wide by 22in deep by 36in high (with castor base). Weight: 234lb. Finish: Cabinet—white or cream stove enamel; door—light grey stove enamel; control panel—heat-resisting high-impact polystyrene. Price: 105gn. Hire purchase: £10 down and 15s weekly.

English Electric Co. Ltd., Queens House, Kingsway, London, W.C.2 Holborn 6966.

Readers' Information Service, Ref. D. Date 3/2/60.

New Rental Telephone (E)

The new Interphone system of communication consists of two units as illustrated. These are completely self-contained and are powered internally by ordinary flat torch batteries. They are supplied on a rental basis and can be rented for as little time as the hirer requires. Connection is simple and a length of any bell wire or twin flex is suitable connected to the terminals shown on the underside of the buzzer-box. Calling is effected by pressing the button in the centre of the box;

distance makes no difference to the volume of either the buzzer or speech. Advantages are that the Interphone can be moved from place to place like an inspection lamp or screwed to a wall, shed, tree or other suitable location, and it can be slung around the neck and carried, for example, by surveyors over long distances. Charges: 4s per week per installation or 3s per week if required for a period of at least two years. New batteries are supplied free of charge every six months.

Harvid Commodities Ltd., 84 Baker Street, London, W.1.

Readers' Information Service, Ref. E. Date 3/2/60.

Profiled Vertical Cladding

The Pillar Panel is a new profiled vertical cladding material. It is made from Cellactite fire-resisting protected metal, and the panels are so designed that they may be spaced at any interval between Cellacite corrugated sheets. The standard colour finishes are green, russet and aluminium, but other colours can be supplied to special order and all can be applied to weatherside, underside or both sides of the panel if desired. The natural colour is black.

The Cellactite Co. Ltd., Whitehall Place, Gravesend, Kent.

Place, Gravesend, Kent. Readers' Information Service, Ref. F. Date 3/2/60.

Floor Jointing Machine

The makers of Phenco flooring have patented a portable electric machine that joins together the edges of plastic flooring. The machine, known as the Mouse, generates its own heat as it





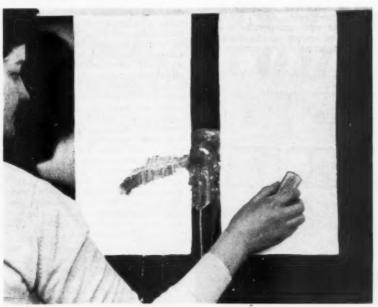
moves along and seals the edges of the flooring with a heated strip of plastic material from a drum it tows along behind itself. The Mouse has its own feelers, and if they touch any obstruction the machine automatically comes to a standstill.

Phoenix Rubber Co. Ltd., Slough, Bucks,

Readers' Information Service, Ref. G. Date 3/2/60.

New Brolac Paint and Colour Service (H)

The makers of Brolac and Murac paints have introduced a new paint and a new colour tinting service. The paint, known as Brolac P.E.P., is of the emulsion type with a co-polymer base. It can be applied on any sound, paintable surface, both indoors and out, by either brush, spray or roller, and will, it is claimed, neither blister, peel nor flake off, even in the humid atmospheres of kichens and bathrooms. The remarkable adhesion of the new paint, even to gloss surfaces, is attributable to the use of a new type of vinyl co-polymer resin, which is at present supplied exclusively to its makers. Our illustration shows a destruction test in which a stoved enamel sheet was painted on the right with Brolac P.E.P. and on the left with a good quality rival emulsion paint. The panel was then soaked in water after lipstick had been applied to both finishes, which were then equally scrubbed with a nylon brush and water. The old form of emulsion immediately broke down but the lipstick was cleaned off the P.E.P. surface, which remained unharmed. The paint also incorporates fungicides and can be used as a base for gloss paint. It is supplied in a range of 30 standard ready mixed colours. The other innovation is the commencement of



NEW PRODUCTS (continued)

a colour-tinting service, which adds 90 different tints to the colour ranges of Brolac Gloss, Brolac Eggshell and Murac Velvet as well as the new This service is P.E.P. Emulsion. known as the Brolac Colorvogue and is a tube-tinting system which does not require special base paints. The tinters are universal and can be used with all the four Brolac and Murac finishes. There are three sizes, each of eight tinter colours, and colour formula charts and swivel books with formulae tell the user exactly how much to add to the base paint to obtain the required tint. It will cost 6d, 1s, 1s 3d and 2s 6d, respectively, to tint pint, quart, } gal and gallon tins. P.E.P. paint will cost no more than other quality emulsion paints.

John Hall & Son (Bristol and London) Ltd., Romilly House, Petherton Road, Hengrove, Bristol, 4 Whitchurch 2162.

Readers' Information Service. Ref. H. Date 3/2/60,

New Riveting Tool (I)

A portable hydraulic riveting tool, of German origin, is now available in this country. Known as the Gesipa, it operates from an 80/100lb air line and consumes only I cu ft of air for many hundreds of rivets which can be fixed at the rate of 25 to 30 per minute. It is anticipated that the tool will be of particular appeal to aircraft manufacturers, metal workers and body builders who have generally adopted the blind riveting system for fixing metal or plastics materials together. The material should first be drilled and punched to suit the size of the rivet, normally up to lin A rivet with loose mandrel

should then be placed into the nosepiece of the gun, and the tool, with open head of the rivet protruding, inserted into the drilled hole. A pull of the trigger will release air into the pressure chamber of the gun and sharply draw in the mandrel of the rivet, causing the rivet head to compress and spread. Special features of the Gesipa are: very powerful action; the shape of the head enables awkward corners and narrow apertures to be negotiated without the use of attachments; rivets and mandrel pins are specially shaped to reinforce the riveted joint; and only a light air line is required. Weight: 21b. Price: £48. Hand pliers, to perform the operation manually, cost £3 18s 0d. Aluminium or copper rivets vary be-tween 30s and 70s per thousand. Delivery: ex stock.

Trend Industrial Equipment Ltd.. 77 & 95 Dudden Hill Lane, N.W.10. Willesden 4150.

Readers' Information Service, Ref. 1. Date 3/2/60.

New Commer Vehicles (J)

All models in the latest Commer range of lightweight commercial and passenger carrying vehicles, recently introduced by the Rootes Group, can be powered by either an O.H.V. fourcylinder petrol engine or a Perkins 4/99 four-cylinder diesel engine. The range is based on a 15cwt vehicle of unitary construction, with 19 different body styles, including caravans, delivery vans, pick-ups, light buses, mobile shops, ambulances and shooting brakes. The caravan (illustrated with extended roof) is available in either two-berth or four-berth ver-sions. Equipment of this model includes a wardrobe, Calor gas cooker, sink unit, lockers and storage cupboards. Maximum headroom is provided by an easily operated springloaded telescopic roof which is waterproof and incorporates a ventilator. The seating arrangement provides a dinette for four persons, with



a table which can be stowed alongside the wardrobe when not in use. The seats can be adapted to provide a lounge if required. By means of a system of hinged links, the seats can be adjusted to face front or rear and can also be folded flat to form fullsized double and single beds. Other features include linoleum, curtains, veneer finishes to all cupboards and plastic facings to the working surfaces. Standard colours: red, yellow, green, grey and blue. Caravan prices (including purchase tax): two-berth. £850 (petrol); £962 (diesel); four-berth, £915 (petrol); £1,027 (diesel).

Commer Cars Ltd., Luton, Bedford-

Readers' Information Service, Ref. J. Date 3/2/60.

New Automatic Boilers

The Telcomatic fully automatic boilers which are of Dutch origin are now being manufactured by this company in the U.K., under licence from the Dutch patentees. The boilers are designed for either solid fuel or oilfiring and most solid fuels, ranging from coke and low grade steam coals to anthracite, will be found to be suitable. The boiler is fully automatic on either solid or oil fuels and is stated to be clean in operation and to give a guaranteed minimum efficiency of 85 per cent. Many sizes of boiler are available, ranging from a capacity of 500,000 B.Th.U./hr to 10,000,000 B.Th.U./hr. It is claimed that when operating on some cheaper solid fuels the Telcomatic boiler installation can show important economies even when compared with oilfired installations. They will provide both space heating and hot water supplies and the manufacturers anticipate that they will be found suitable for use in factories, dairies, office blocks and schools, etc.

The Telegraph Construction and Maintenance Co. Ltd. Mercury House, Theobald's Road, London W.C.1. Holborn 8711.

Readers' Information Service. Ref. K. Date 3/2/60.



WHEN DESIGNING THAT NEW INDUSTRIAL BUILDING YOU MUST CONSIDER THE REQUIREMENTS OF THE THERMAL INSULATION ACT*

They call for a high performance factor in thermal insulating materials. If at the same time you wish to ensure effective flame resistance, excellent light reflection and no decoration problems, then . . .

CELOTEX

FRIB

which has a "k" factor of 0.35, a Class 1 (B.S.476) rating on both surfaces (no spread of flame whatsoever), is light in weight, economic in use, easily handled and readily installed with Celotex versatile metal fixing systems...

RESISTANT



(FLAME

* The Thermal Insulation (Industrial Buildings) Act 1957

IS THE COMPLETE ANSWER

INSULATION

TO	CEI	LO	TEX
1	IMI	TEI	0

DEPT. F. NORTH CIRCULAR RD., STONEBRIDGE PARK, LONDON, N.W.10. ELGAR 5717

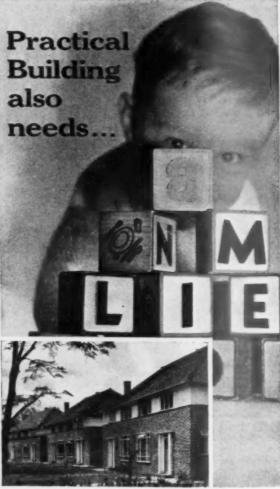
Please send me technical details and a sample of your Celotex Flame Resistant Insulating Board. I am also interested in bevelled panels.

IA	3.0	107												
4.28	44.8	80	*	×	۰	*	×	٠	۰	*	۰	٠	•	0

IDDRESS

BOARDI

CII



London County Council Sheerwater Estate, Woking, Surrey.

for Durability - workability

You take no chances with LIME/gauged mortars. Under every possible practical test, LIME has proved itself supreme. Remember: LIME/gauged mortars ensure without question: Reliable strengths within closely known limits. Sufficiently rapid stiffening to take weight of superimposed structure as work proceeds.

Reliable strengths within closely known limits.
Sufficiently rapid stiffening to take weight of
superimposed structure as work proceeds.
The most suitable texture for frost resistance.
Minimum shrinkage producing weatherproof
brickwork and masonry.
Good workability and plasticity.
The correct mix can be chosen to give durability for all

The correct mix can be chosen to give durability for all practical conditions. It is not possible to misuse lime in conjunction with the proper materials.

THE SOUTHERN LIME ASSOCIATION

Hanover House, 73-78 High Holborn, London, W.C.I. Tel: HOLborn 5434

or

THE LIMESTONE FEDERATION

Manfield House, 376-8 Strand, London, W.C.2. Tel: COVent Garden 0621



A booklet on LIME sand mixes gauged with coment and conforming to British Standard Codes of Practice will be sent free on opplication to either of the above.

LIME-MANUFACTURED TO COMPLY WITH B.S.890

-This is your safeguard to ensure satisfaction.



Brush off the fear of FIRE!

With OXYLENE BORAM Fire Retardant Coating which raises inflammable surfaces to Class 1 "surface spread of flame" (B.S. 476-1953).

OXYLENE BORAM can be overpainted or applied to painted surfaces without loss of fire retarding qualities. It gives real fire protection and is approved by Local and Fire Authorities.

"Used in every Industry"

Write for particulars.

OXYLENE RORAM

Use
TRANSPARENT
for Veneers
and
Fabric RINSE
for Textiles

draw the line

FIRE RETARDANT COATING

THE TIMBER FIREPROOFING CO. LTD.,

13a Old Burlington Street, LONDON, W.1.

Tels: Regent 2489 (2 lines)

Works at: Market Bosworth, Nuneaton Queen Elizabeth Avenue, Hillington, Glasgow, S.W.2.

DHB/2376

CURRENT MARKET PRICES (LONDON)

These prices apply to material purchased in the quantities named or otherwise as might be expected for a new building of moderate size. They include delivery and are the material basis used in the build-up of "Measured Rates" and subject to the conditions heading that schedule. Prices are under careful constant review but should be confirmed.

3 February. 1960

be confirmed.			3 February, 1960
AGGREGATES A		Vard cube	BRICKLAYERS' SUNDRIES—
lin do do	26/6	Yard cube delivered	AIR BRICKS 9 by 3in 9 by 6in 9 by 9in 12 by 9in
lin sassanad shinala	24/6	(in five-yard	Iron each 2/5 3/11 5/10 7/10 Galvanized do. do. 4/1 6/9 10/2 13/7
lin do do	25/9	loads or	Terra Cotta do. 1/2 2/4 5/7 11/1
Ita annata aktantan	50/-	more)	Chimney pots, Terra 1ft 2ft 3ft 4ft
Charm analysis and	27/6	,	Cotta (11 to 24) do. 8/7 14/11 34/1 58/11
Discond	24/6		2011 (11 10 21) 201
Building sand	24/-		
	21/-		PARTITIONS—
	22/-		18in by 9in Blocks keyed for plastering
Cartage of muck	10/-		Per yd super in 6ton lots
BUILDING MATERIALS AS I	DESCRIBE	D. CENTRAL	In solid clinker including any half blocks 3/9 4/4 5/3 In cellular clinker blocks 3/11 4/7 5/3
LONDO		,	In hollow clay blocks 4/5 5/5
CEMENTS packed in paper bags		Per ton	Clinker blocks in small quantity 6/1 7/2 8/7
Portland in 6ton lots		112/-	Clinker blocks in small quantity 6/1 7/2 8/7 Intermediate quantities in all types may be had at intermediate
Do., from Iton to 5ton 19cwt do.		124/-	prices.
Do., Rapid hardening (6ton lots) Do. (but 1ton to 5ton 19cwt)		122/6	Smooth in lieu of keyed faces extra cost per side 3d per yd super
C		20010	since in the circles and con per side of per ju super
Do "417" or "Polar" (do)			OIL ING
T) - 4493 (1-4-)		156/6	SINKS—
201, 11110 11011 (1010)		2.770	Fireclay white glazed in and out—standard quality
LIME—	134/6 (1ton	loads) deliv'd	London pattern no overflow
Hydrated including	132/- (2/3	do.) do.	London pattern, no overflow, 6in deep
	122/- (4/5	do.) do.	6in deep
	120/- (6	do.) do.	Bertast, plant edge, four deep 90/6 151/3 204/3
PLASTER—			ELUE LININGS BLAIN CIRCULARS/EIRECLAVA
Marian tak		234/- ton	FLUE, LININGS, PLAIN, CIRCULAR (FIRECLAY)— Foot lineal Each
		239/- do.	Straight Bends
Sirapite, do		175/- do.	9in diameter
D C 1.1		183/3 do.	10in do
Hardwall, do		174/- do.	12in do
		164/6 do.	9in diameter, beaded end, 12in high 6/3
Do. do. white		174/- do.	
lin Gypsum Plaster Lath ex works (6		2/31 sq yd.	FLUE PIPES AND FITTINGS—
in Do. do. Wallboard	do.	$2/6\frac{1}{2}$ do.	4in 5in 6in
31 in Jute scrim (100yd roll)		9/6 each	Heavy asbestos type, 6ft length . 18/6 25/6 32/6
Cow hair (under 3cwt)		109/- cwt	Do. 3ft length 9/3 12/9 16/3
FIRECLAY—			Do. bends
In non-returnable bags (1ton lots)	, ,	13/- ton delivered	Light asbestos type, 6ft lengths 16/- 20/- 25/6
Fire cement		12/3 14lb	Do. 3ft length 8/- 10/- 12/9
		14/5 1110	Bends 5/7 7/1 8/8
BRICK			Baffler 15/5 18/4 19/4
BACKING BRICKS (in truck load			
Flettons		1,000 delivered	DRAINAGE GOODS
Do. Keyed	120/-	do.	GLAZED STONEWARE STANDARD LIST (NOV., 1956)
Do. bullnose	152/6	do.	4in 6in 9in
Blue wirecuts (Net)	542/-	do.	ORDINARY TYPE—Each
White	202/- 400/6	do.	Pipes in 2ft lengths 3/4 5/- 9/-
Southwater engineering (Class A)		do.	Bends 5/- 7/6 20/3
Firebricks—2\frac{1}{2}in \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \tau \qua	95/9 per	100 delivered do.	Junctions (4in on 4in, 6in on 6in,
Do. —3in	115/-	uo.	9in on 9in) 8/4 12/6 27/-
STOCK BRICKS—			Gullies with 4in outlets 12/6 13/9 22/6
Mild stocks	185/- per	1.000 at Works	4in horizontal inlets 4/- 4/- 4/-
		do.	4in vertical do 6/- 6/- 6/-
Second, do	274/-		
Second, do	274/ - 300/ -	do.	Black iron grids 1/6 2/10 5/6
Second, do	300/-	do.	
First, do	300/-	do.	Adjustment to Current Cost
First, do	300/- er 1,000 in 1	do. orry loads.	Adjustment to Current Cost 2ton lots or more Less than 2ton lots
First, do	300/- er 1,000 in 1 150/- per	do. orry loads.	Adjustment to Current Cost 2ton lots 2ton lots Or more 2in to 9in diameter 2ton lots 2ton lots 2ton lots 2ton lots 2ton lots 0ton lots 2ton lots 0ton lots 2ton lots
First, do	300/- er 1,000 in 1 150/- per 220/-	do. orry loads. 1,000 delivered do.	Adjustment to Current Cost 2ton lots 2ton lots 0r more 2in to 9in diameter "Best" pipes and fittings. Adjustment to Current Cost Less than 2ton lots 0r more 50 pieces Under 50 pieces
First, do	300/- er 1,000 in 1 150/- per 220/- 604/-	do. orry loads. 1,000 delivered do. do.	Adjustment to Current Cost 2ton lots 2ton lots 0r more 2in to 9in diameter 2ton lots
First, do. Add for delivery—approx. 55/- po FACINGS (ex truck or lorry)— Rustics White Blue pressed, 2\(\frac{2}{3}\) in (Net) Do. bullnose	300/- er 1,000 in 1 150/- per 220/- 604/- 618/-	do. orry loads. 1,000 delivered do. do. do.	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter Best" pipes and fittings. Percentages to add -18\{\frac{1}{2}\%} Net -5\% Further percentages to be independently added in respect of significant contents.
First, do. Add for delivery—approx. 55/- p FACINGS (ex truck or lorry)— Rustics White Blue pressed, 2\(\frac{1}{2}\) in (Net) Do. bullnose Reds (Multi sand faced)	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/-	do. orry loads. 1,000 delivered do. do. do. do.	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter Best" pipes and fittings. Percentages to add -18 \{ \}\% Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37 \{ \}\}
First, do	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/-	do. orry loads. 1,000 delivered do. do. do. do. do.	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter Best" pipes and fittings. Percentages to add -18\{\frac{1}{2}\%} Net -5\% Further percentages to be independently added in respect of significant contents.
First, do. Add for delivery—approx. 55/- p FACINGS (ex truck or lorry)— Rustics White Blue pressed, 2\(\frac{1}{2} \) in (Net) Do. bullnose Reds (Multi sand faced) White glazed stretchers Do. headers	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/-	do. orry loads. 1,000 delivered do. do. do. do. do. do.	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter Best" pipes and fittings. Percentages to add -18 \{ \}\% Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37 \{ \}\}
First, do. Add for delivery—approx. 55/- p FACINGS (ex truck or lorry)— Rustics White Do. bullnose Reds (Multi sand faced) White glazed stretchers Do. headers Do. bullnose Do. bullnose	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/-	do. orry loads. 1,000 delivered do. do. do. do. do. do. do.	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter "Best" pipes and fittings. Percentages to add -18½% Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37½ British Standard Tested, 47½.
First, do	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/- 2053/-	do. orry loads. 1,000 delivered do. do. do. do. do. do. do. do. do. do	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter "Best" pipes and fittings. Percentages to add -18\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
First, do	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/-	do. orry loads. 1,000 delivered do. do. do. do. do. do. do. do. do. do	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter "Best" pipes and fittings. Percentages to add -18 \{ \frac{1}{2}\%} \text{Net} Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37 \{ \frac{1}{2}\} British Standard GOODS— Each Adjustment to Current Cost Less than 2ton lots Under 50 pieces Net +5% Further percentages to be independently added in respect of British Standard Tested, 47 \{ \frac{1}{2}\}. IRON DRAINAGE GOODS—
First, do. Add for delivery—approx. 55/- p FACINGS (ex truck or lorry)— Rustics White Blue pressed, 2\(\frac{1}{2}\) in (Net) Do. bullnose Reds (Multi sand faced) White glazed stretchers Do. headers Do. double stretchers Do. double tretchers Do. double headers Breeze fixing bricks	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/- 2173/-	do. orry loads. 1,000 delivered do. do. do. do. do. do. do. do. do. do	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter Best" pipes and fittings. Percentages to add —18\{\frac{1}{2}\%\} Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37\{\frac{1}{2}\} British Standard GOODS— Each Cast iron pipes, 9ft long
First, do	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/- 2053/- 2173/- 30/3 per	do. orry loads. 1,000 delivered do. do. do. do. do. do. do. do. do. do	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter Best" pipes and fittings. Percentages to add —18\{\frac{1}{2}\%\} Net +5\% Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37\{\frac{1}{2}\} British Standard Tested, 47\{\frac{1}{2}\}. IRON DRAINAGE GOODS— Each Cast iron pipes, 9ft long
First, do. Add for delivery—approx. 55/- p. FACINGS (ex truck or lorry)— Rustics White Blue pressed, 2\(\frac{1}{2} \) in (Net) Do. bullnose Reds (Multi sand faced) White glazed stretchers Do. headers Do. bullnose Do. double stretchers Do. double headers Breeze fixing bricks	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/- 2053/- 2173/- 30/3 per	do. orry loads. 1,000 delivered do. do. do. do. do. do. do. do. do. do	Adjustment to Current Cost 2ton lots 1
First, do. Add for delivery—approx. 55/- p. FACINGS (ex truck or lorry)— Rustics White Blue pressed, 2½in (Net) Do. bullnose Reds (Multi sand faced) White glazed stretchers Do. headers Do. bullnose Do. double stretchers Do. double stretchers Breeze fixing bricks Fire tile and lumps Wall ties—8in by ½in by ¾in,	300/- er 1,000 in 1 150/- per 220/- 604/- 618/- 350/- 1696/- 1670/- 2120/- 2053/- 2173/- 30/3 per 34/- ft cu	do. orry loads. 1,000 delivered do. do. do. do. do. do. do. do. do. do	Adjustment to Current Cost 2ton lots Or more 2in to 9in diameter "Best" pipes and fittings. Percentages to add -18 \{\frac{1}{2}\%}\% Net -5% Further percentages to be independently added in respect of British Standard pipes, etc., 10. "Best" Tested pipes, 37 \{\frac{1}{2}\} British Standard Tested, 47 \{\frac{1}{2}\}. IRON DRAINAGE GOODS— Each Cast iron pipes, 9ft long Do. 6ft do

CURRENT MARKET PRICES (Continued)

Traps, high level, invert Inlet, belimouth pattern		Continued 4in . 33/8 . 17/8	6in 91/4 35/7	each	THERMAL INSULATION— in Insulating Gypsum Baseboard (600sq yds) 2/9 sq yd in Do. Do. Lath do 2/9 do.
Do, with one vertical brance	h .	. 31/-	58/2	do.	in Do. Do. Wallboard do 3/- do. in Asbestos (Fully-compressed) Sheet 8/4 do.
Do. with two do.		. 84/-	122/3	do.	in Insulating Cork Slabs
Extra for sealed cover		. 10/8	13/10	do.	Silicate Cotton (2ton lots) 1/6 ft cub
AINWATER SHOES—		4in	6in		
With vertical inlet and rebate	d top ,	. 44/1	87/9	each	
Extension piece Flat loose coated grating	• • •	. 19/4	23/3	do.	STONE
Loose solid coated cover		6/2	6/2	do.	PER FOOT CUBE in random blocks not exceeding 20ft cube in
				-	each, free on rail London. Monks Park 9/7 St. Aldhelm 10/10
MANHOLE CHANNELS, WI Each		LAZED- 4in	- 6in	9in	Portland brown Whitbed 9/2 Doulting 10/2 Beer 9/-
Straight, 2ft long		. 19/2	28/1	47/2	Total Marie
Taper, do		. 31/11	31/11	48/5	Property and the second
Bends, main, half section		. 37/-	53/7	88/-	
Do., branch, do. Do., do. three quarters, do.	0.0	31/11	31/11	_	TIMBER
Junctions, single		. 30/7	53/7	THE REAL PROPERTY.	Softwood—sawn—random lengths.
Do., double		. 42/1	72/8	_	Carcassing quality Per standard Per cubic 1 12/8
ROWN GLAZED CHANNI	EI S				Joinery quality £125 and up 13/4
Based on standard list (less					Plain edged unsorting flooring in lin 1\(\frac{1}{2}\)in 1\(\frac{1}{2
Half-round main channel (20)	lone	4in	6in		in Hardboard 4/1 sq yd.
Half-round main channel (2ft Extra for step ends			3/9	7/-1 6/9	Larger quantities cost less.
Extra for outlets	**	5/-	7/6	0/2	
Channel bends with splayed	ends .	. 7/6	11/3	-	
Three-quarter section do.		. 10/-	15/-	-	SUNDRIES— Dia, 3in 6in 9in
					SUNDRIES
IANHOLE COVERS—				Black	bolts, nuts and $\frac{1}{3}$ $\frac{1}{8}$ $\frac{2}{1}$
24 by 18in foot traffic	**			29/3 each	Washers, Each J In 1/9 2/4 3/- Sashline hemp good quality:) No. 6 No. 8 No. 1
Do. Strong do Do. Light car traffic	** *		2.4	53/9 do.	Per vd Run 10d 1/14 1/5
Do. Light car traffic Do. Road traffic	**		**	95/3 do. 19/3 do.	Floor brads
Do. Road traffic	** '	* **	1	19/3 00.	Floor brads
4in Mica valve fresh air inlet Plumber's hemp		9/- 1/5	1	do. per lb do.	HARDWOOD. Normal joinery quality. Per ft cut
Gaskin, caulking Canvas backed hair felt, 4in	wide .	. 1/3* 9d		per ft run	Mahogany, African Square edge 30/-
Gaskin, caulking Canvas backed hair felt, 4in	wide .	9d			Mahogany, African Square edge 30/-
Gaskin, caulking Canvas backed hair felt, 4in ROOFING	MATE	9d			Mahogany, African . Square edge . 30/- do. Honduras do. . 66/- Teak, Burma and Siam do. . 78/- Walnut, Australian do. . 84/-
Gaskin, caulking Canvas backed hair felt, 4in ROOFING	MATE	RIALS	1		Mahogany, African . Square edge . 30/- do. Honduras do. . 66/- Teak, Burma and Siam do. . 78/- Walnut, Australian do. . 84/-
Gaskin, caulking Canvas backed hair felt, 4in ROOFING	MATE	RIALS Q	uantity 500 to	per ft run	Mahogany, African . Square edge . 30/- do. Honduras do. . 66/- Teak, Burma and Siam do. . 78/- Walnut, Australian do. . 84/-
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered)-	MATE	RIALS Quilloads	uantity 500 to 999	1 to	Mahogany, African Square edge 30/- do. 66/- Teak, Burma and Siam do. 78/- Walnut, Australian do. 84/- Oak, English Sawn Logs 42/-
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11	MATE F Lo per 224	RIALS Quality of the state of	uantity 500 to 999 per 100 265/-	1 to 49 per doz 39/-	Mahogany, African Square edge 30/- do. 66/- Teak, Burma and Siam do. 78/- Walnut, Australian do. 84/- Oak, English Sawn Logs 42/- do. Yugoslavian do. 47/6 Walnut, African do. 25/-
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10	MATE FLo per . 222 . 20:	RIALS Quads 1,000 146/- 21/6 13/-	uantity 500 to 999 per 100 265/- 237/6	1 to 49 per doz 39/- 35/-	Mahogany, African . Square edge . 30/- do. Honduras do. . 66/- Teak, Burma and Siam do. . 78/- Walnut, Australian do. . 84/-
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11	MATE FLo per . 222 . 20:	RIALS Quals 1,000 146/- 21/6 13/- 20/-	uantity 500 to 999 per 100 265/- 237/6 164/6 131/-	1 to 49 per doz 39/- 35/- 24/3 19/3	Mahogany, African Square edge 30/- do.
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Court	F Lc per	RIALS Quads 1,000 146/- 21/6 13/- 20/- 68/-	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6	Mahogany, African
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered)- Sizes in inches 22 by 11	F Lc per	RIALS Quality (ut) (a) (a) (b) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	uantity 500 to 999 per 100 265/- 237/6 164/6 131/-	1 to 49 per doz 39/- 35/- 24/3 19/3	Mahogany, African
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11	F Lc per . 22/. 20/	Quality of the control of the contro	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9	Mahogany, African Square edge 30/- do.
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Court 14 by 9 TILES (Brosley and Staffordsh	F Lc per . 224	Quill pads 1,000 146/- 21/6 68/- 228/-	uantity 500 to 999 999 to 999 265/- 237/6 164/6 131/- 70/9 31/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6	Mahogany, African
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 14 by 9 14 by 4 10 in Machine made 10 in by 6 in Machine made 10 on, hand made, sand faced	F Lc per	RIALS Quality Quali	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per.100 44/9 58/-	Mahogany, African Square edge 30/- do
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 14 by 9 14 by 4 CILES (Brosley and Staffordsh 104 in by 64 in Machine made	F Lc per - 22' . 20' . 11' . 1	RIALS Quality and a line of the property of	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per.100 44/9 58/- ozen	Mahogany, African Square edge 30/- do
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Coun 14 by 9 Damp Coun 14 by 4 CILES (Brosley and Staffordsh 10 1 by 6 1 m Machine made Do., hand made, sand faced	F Lo per	RIALS Quality Quali	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per.100 44/9 58/-	Mahogany, African Square edge 30/- do
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 14 by 9 14 by 9 14 by 4 FILES (Brosley and Staffordsh 10½ in by 6½ in Machine made Do., hand made, sand faced Hips, valleys and angles	F Lo per	RIALS Quality Quali	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per.100 44/9 58/- ozen per 100	Mahogany, African
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Court 14 by 9 TILES (Brosley and Staffordsh 104in by 64in Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 64in by 16 gauge, drive screws 74in by 4 hook bolts and n	FLC Per 224 200 14 1111 11 11 11 11 11 11 11 11 11 11 1	Per 1,6 1,000 1,00	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/- 000 66 17/9 8/31/2 17/9 8	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per 100 25/6	Mahogany, African Square edge 30/- do
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 14 by 9 Damp Coun 14 by 9 Land Staffordsh 10 1 in by 6 1 in Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 6 11 in by 16 gauge, drive screws 7 1 in by 16 gauge, drive screws 7 2 in by 16 gauge, drive screws 7 3 in by 16 gauge, drive screws 7 4 in by 16 gauge, drive screws 7 4 in by 16 gauge, drive screws 7 4 in by 16 gauge, drive screws 7 5 in by 16 gauge, drive screws	FLC per 224 200 14 11 11 11 11 11 11 11 11 11 11 11 11	RIALS Quality and the second of the second	uantity 500 to 999 per 100 265/- 237/6 164/6 70/9 31/- 000 66 - 17/9 8 57/9 8 57/9 4/10	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per 100 25/6 yd super pross do. do.	Mahogany, African Square edge 30/- do
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 14 by 9 15 Damp Cours 14 by 9 16 Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 6 44 in by 16 gauge, drive screws 74 in by 16 gauge, drive screws 75 in by 16 gauge, drive screws 76 in by 16 gauge, drive screws 77 in by 16 gauge, drive screws 78 in by 16 gauge, drive screws 79 in by 16 gauge, drive screws	FLC per 224 200 14 11 11 11 11 11 11 11 11 11 11 11 11	Per 1,6 1,000 1,00	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/- 000 66 1- 17/9 8 57/9 4/10	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per 100 25/6 yd super pross do. do.	Mahogany, African Square edge 30/- do
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Court 14 by 9 Damp Court 14 by 9 FILES (Brosley and Staffordsh 104in by 64in Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 64in by 16 gauge, drive screws 74in by 16 gauge, drive screws 74in by 16 gauge, drive screws 74in by 16 gauge, drive screws 75in by 16 gauge, drive screws	FLC per	Per 1,4	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/- 000 66 17/9 8/3‡ 17/9 8/3† 17/9 4/10 2/-	1 to 49 per doz 39/- 35/- 24/3 10/6 4/9 per .100 44/9 58/- per 100 25/6 yd super gross do. do. do.	Mahogany, African Square edge 30/- do. Honduras do 66/- Teak, Burma and Siam do 78/- Walnut, Australian do 84/- Oak, English Sawn Logs 42/- do. Yugoslavian do 47/6 Walnut, African do 25/- BUILDING BOARDS Description Rate 202/- 22mm do. do 202/- 22mm do. do 245/- Austrian Mahogany faced one side, blockboard 18mm thick 348/- Austrian figured Oak faced one side, blockboard 19mm thick 407/- Beech, 6mm plywood 108/- Birch, do. do 81/- Do. 9mm do 115/- up to Teak faced one side, plywood 6mm thick 374/- Austrian figured Oak one side, 6mm 224/- Austrialian do. Walnut do. do. 18 in 383/- bundle
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Court 14 by 9 TILES (Brosley and Staffordsh 10¼in by 6¼in Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 6 ¼in by 16 gauge, drive screws 7¼in by ¼ hook bolts and n Washers, round, flat galvanize Do. do. bituminous ROOFING FELT— Sanded bitumen felt (44lb)	FLC per . 224 . 200	Per 1,(1,000 1,000	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/- 000 66 17/9 8/31/1 17/9 4/10 2/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per.100 44/9 58/- ozen 25/6 yd super gross do. do. do. do super	Mahogany, African Square edge 30/- do.
ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 14 by 9 15 Damp Cours 14 by 9 16 Machine made 17 Do., hand made, sand faced 18 Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 6 44 in by 16 gauge, drive screws 74 in by 16 gauge, drive screws 74 in by 16 gauge, drive screws 75 in by 16 hook boths and mashers, round, flat galvanized Do., do. bituminous ROOFING FELT— Sanded bitumen felt (441b) Do., but 601b in weight	MATE Loc per . 22/2. 20/3. 11/3 se 6/4. 3 ire)—, 6 ton loc (Berks r	PRIALS Q1 Q1 Q1 Q1 Q1 Q1 Q1 Q1 Q1 Q	uantity 500 to 999 265/- 237/6 164/6 131/- 70/9 31/- 000 66 /- /3 per do 000 /6 8/31: 17/9 8 57/9 4/10 2/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per 100 25/6 yd super pross do. do. do. do.	Mahogany, African Square edge 30/- do. Honduras do 66/- Teak, Burma and Siam do 84/- Oak, English Sawn Logs 42/- do. Yugoslavian do 47/6 Walnut, African do 245/- Walnut, African do 202/- 22mm do. do 245/- Austrian Mahogany faced one side, blockboard 18mm thick 348/- Austrian figured Oak faced one side, blockboard 19mm thick 407/- Beech, 6mm plywood 108/- Birch, do. do 81/- Do. 9mm do 115/- up to Teak faced one side, plywood 6mm thick 374/- Austrian figured Oak one side, 6mm Austrian figured Oak figure
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 16 by 10 14 by 9 Damp Cours 14 by 9 Damp Cours 14 by 9 TILES (Brosley and Staffordsh 104 in by 64 in Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 64 in by 16 gauge, drive screws 74 in by 16 gauge, drive screws 74 in by 16 gauge, drive screws 75 in by 16 hook bolts and n Washers, round, flat galvanized Do. do. bituminous ROOFING FELT— Sanded bitumen felt (44lb) Do., but 60lb in weight Inodorous felt, best quality	FLC per 22/20 20 144 115se 66 33 ire)—, 6 ton lo (Berks 1	Per 1,4 1,000 1,00	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/- 000 66 17/9 8/31/1 17/9 4/10 2/-	1 to 49 per doz 39/- 35/- 24/3 10/6 4/9 per .100 44/9 per 100 25/6 yd super gross do. do. do. do. do. do. do. do.	Mahogany, African Square edge 30/- do. Honduras do 66/- Teak, Burma and Siam do 78/- Walnut, Australian do 84/- Oak, English Sawn Logs 42/- do. Yugoslavian do 47/6 Walnut, African do 25/- BUILDING BOARDS Description Rate 202/- 22mm do. do 245/- Austrian Mahogany faced one side, blockboard 18mm thick 348/- Austrian figured Oak faced one side, blockboard 19mm thick 407/- Beech, 6mm plywood 108/- Birch, do. do 115/- up to Teak faced one side, plywood 6mm thick
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 14 by 9 Damp Court 14 by 9 TILES (Brosley and Staffordsh 10½in by 6½in Machine made Do., hand made, sand faced Hips, valleys and angles Plain concrete tiles Sheeting asbestos corrugated, 6 4½in by 16 gauge, drive screws 7½in by 16 gauge, drive screws 1½in by 16	FLC per 22/20 20 144 115se 66 33 ire)—, 6 ton lo (Berks 1	PRIALS Q1 Q1 Q1 Q1 Q1 Q1 Q1 Q1 Q1 Q	uantity 500 to 999 265/- 237/6 164/6 131/- 70/9 31/- 000 66 17/9 8 57/9 4/10 2/-	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per 100 25/6 yd super gross do.	Mahogany, African Square edge 30/- do.
Gaskin, caulking Canvas backed hair felt, 4in ROOFING WELSH SLATES (delivered) Sizes in inches 22 by 11 20 by 10 18 by 10 16 by 10 16 by 10 11 by 9 10 Damp Court 14 by 9 11 Damp Court 14 by 9 15 Damp Court 16 by 10 16 by 10 17 Damp Court 18 by 10 19 Damp Court 19 by 10 19 Damp Court 19 by 10 10 Damp Court 19 by 10 10 Damp Court 10 Damp Court 10 Damp Court 11 by 10 11 by 10 12 Damp Court 12 by 10 13 by 10 14 by 10 15 Damp Court 16 by 10 16 By 10 17 Damp Court 18 by 10 18 by 10 19 Damp Court 10 Damp Court 11 by 10 11 by 10 12 by 10 13 by 10 14 by 10 15 by 10 16 by 10 16 by 10 16 by 10 17 by 10 18 by 10 18 by 10 19 by 10 10 by	FLC per . 224 . 144 . 111 se 6 . 3. ire)— , 6 ton lo (Berks r	Per 1, 1,000 1	uantity 500 to 999 per 100 265/- 237/6 164/6 131/- 70/9 31/- 000 66 17/9 8/31/2 17/9 4/10 2/- 1/1 y 1/7 2/11 2/3	1 to 49 per doz 39/- 35/- 24/3 19/3 10/6 4/9 per 100 44/9 52en per 100 25/6 yd super gross do.	Mahogany, African Square edge 30/- do.



Water

- just how wonderful most people only realise when they turn on a tap and nothing happens! Thanks to modern plumbing we can take it for granted. But of course, as every plumber knows, there are some things that *can* safely be taken for granted – like the complete dependability of Kontite fittings.

Perfect joints at the turn of a spanner

There are over 22,000 types and sizes of KONTITE compression fittings, each designed to make plumbing easier, quicker, better and more economical.

Produced in gummetal to resist dezincification, they are made to fit all pipe sizes, up to 6" bore.

Deliveries? Unbeatable
— most items by return.
Catalogue? With pleasure.



Plan right with Kontite



KAY & COMPANY (ENGINEERS) LTD - BOLTON - LANGS - TELEPHONE: BOLTON 3041 LONDON OFFICE: 36 VICTORIA STREET - SW1 - TEL: ABBEY 2144

A member of the ALENCO group of companies



savings in steel

DENISON FRENCH

DENISON FRENCH LTD. CONSTRUCTIONAL ENGINEERS 67 CHANCERY LANE, LONDON, W.C.2 **TELEPHONE HOL 2587**

Steel is at the core of a good building. We have been designing structural steelwork for 32 years, improving the quality, cutting the steel weight, often by 20% or more, and speeding up deliveries.

Advice and design suggestions are freely given at the initial stages to save the cost of later modifications.



The TYROL HAND OPERATED MACHINE

for

applying Tyrolean rough-cast cement finish for the decorative treatment of walls.

- ★ Light Weight
- * Uniform texture
- * Rapid coverage
- * Weatherproof
- ★ Simple to use
- * No crazing

Price: £9 18s. 0d.

All enquiries to:

TYROL SALES LTD

54 PARK LANE · CROYDON · SURREY · ENGLAND

Telephone: CROydon 4529

CURRENT MARKET PRICES (Continued)

IRONMO	ONGERY	Y—Cont	inued			CHAIN LINK	FENC	NG-					,
	12in	18in	24in	30in	36in	In 25			lls inclusiv	ve of line	e wire		
Tee hinges (japanned)				20111		2in mesh		26		eight in		60	72
per pair Do., but stronger, per	2/-	3/10		_	-	10 in wire gauge		36 129/- 90/-	150/6		- 2	15/6	258/
Hook and Ride hinges,	3/4	6/1	8/3		_	141 do		62/9				04/9	
per pair	2:	-	13/4		24/10								
BOLTS—each— Cabinet, barrel, straight				8in 10ii	12in	Fitted with b					9in 1	4in b	y 12is
or necked Square spring, with			2/3		-	buckle and	cast key	1	21/6	31/3		54	4/-
Tower bolts	1/4		/	3/6 4/5	5/2	SLIDING DO	DRS, G	ATES	AND PA	RTITIC	NS-		
Barrel bolts	_			5/2 6/8		Factory slidin							
Add to Tower or Barrel bolts if necked	$\frac{1}{2}d$	11d	1 <i>d</i>	1d 1a	1 d	about 100sc covered wit sheeting and	1 24 gau	ge corru	igated galv	vanized			
LOCKS-each-						and gear co	mplete				18	/6 ft	supe
Rim lock, 2 lever, wrote brass bolt and bushing		2/9 0	r Bak	elite do		Factory entra clad with 2					16	/6	do.
Mortice ock, 2 lever, by	ushed 1			inger-plate niture .	s 2/8 . 8/9								
				elite do	. 3/10	STEEL ROOF							
Cylinder latches, japanned	case				16/-	In Skylights a							
Brass sash fastener Casement fasteners (mallea	ble)	* *		each	5/-	lead flashings, a						n Ld	ister il
Do. stays (do	.)			do.	2/2	Size	at Base	6ft	by 4ft	8ft by	6ft		by 8f
Axle pulleys (brass face, iro Do. as last, but with brass Sash line, No. 8 Anchor, yo	wheel 1	lin		do. per ya	4/11	Skylights Lanterns			35 5 55	£50 £76			110
ossii iiie, 130. o Aikiior, y	onow ide	, v 1	• •	per ya	14 1/-	HIGH GRADI					and 6	ner 44	DeF -
MI	ETAL G	OODS				Coke Fed. F			to 40 gal	ions rais	seu Ir	om 40) F (0
British rolled steel joists ex			tions			TYPE						£	s. d
on site (6in by 5in, 8in by						20 gallons per 15in wide, 23i		Eng	mel finish			11	10 (
or 12in by 6in)				£43/10/0	per ton	25 gallons per		Ella	mici miisi		0.0	11	10 (
Extra cost over basis for for						17in wide, 26i			Grey Mo				10 (
9in or 18in by 7in, 14in						40 Callans no	- hour	Do.	. Cream N	lottle		22	0 0
14in or 15in or 16in or 6½in, 20in by 7½in, 10						40 Gallons pe 22in wide, 30		Do	. Cream N	fottle		38	0 (
18in by 8in				10/-	per ton	22111 111110, 201		200	. Cream i	101110		20	
5in by 41in, 7in by 31in,	13in by	5in		15/-				mmn .	NID CORE		nna		
12in by 5in, 22in by 7in 6in by 4½in, 7in or 8in o				20/-	do.			BASIC	ND STE		BES		
4in by 3in, 10in by 4in				30/-	do.	Internal Diameter—	∄in &	lin	in žin	1 in	1 lin	1+in	2in
5in by 21in, 5in by 3in			0.0	35/-	do.	Tubes per ft			1/- 1/2		2/3	2/8	
6in by 3in, 24in by 7½in 3in by 3in				40/- 50/-	do.	Bends each	1/7	1/9	2/- 2/6		5/5	6/2	10/
4#in by 1#in				65/	do.	Elbows, sq. d		1/10	2/2 2/6 2/4 2/1		4/4	5/2	
3in by 11in, 4in by 11in				70/-	do.	Do., round do		2/2	2/6 3/2		5/-	6/2	
lin mild steel reinforcing	rods ex	mill d/c	1	£41/9/0	do.	Crosses de		4/8	5/6 6/6		11/-	13/2	
Extras per ton						Backnuts de		4d	6d 7d		1/-	1/4	
in or in diameter in si				15/- 30/-	per ton	Sockets de	. 6d	6 <i>d</i>	8d 10d	1 1/-	1/4	1/9	2/6
in		**		62/6	do.	dimin. de	. 8d	10 <i>d</i>	1/- 1/2	1/6	2/-	2/8	4/-
in		**	* *	92/6	do.	EX. ST	OCK I	N ORE	DERS OF	£10 OI	R MO	RE	
∱in		0 0		132/6	do.	DISCOUNTS	OFF BA						
{in	× × •	* *	* *	172/6	do.	D.		T	UBE-	0	lua-!		
Extras for length				m 1.0	do	Blac Medium (Blu		,	M	Ga - ledium	Ivaniz	ed	
5ft to 3ft				7/6 15/-	do.	Heavy (Red)			H	eavy -	-15%		
2ft			* *	22/6	do.			FIT	rings-				
40ft to 45ft				15/-	do.	Black Heavy	-10°	,	1.1	Ga eavy –	lvaniz	ed	
45ft to 50ft				22/5	do. per cwt	ricavy	-10/	0	п	cavy -	-27/0	-	
Bolt and Nuts Trench covering, including	trays 1:	in deep	and			RAINS	VATER	GOOL	OS (Painte	ed or U	nnaint	ed	
rebated frames, 9in wide					oot run	44,441			ts of 5cwt				
Do., but 12in wide Do., but 14in wide				27/- 30/-	do.				tandard L	ist		-	-
Do., but 18in wide .				39/-	do.	Pipe: 6ft lengths		each	2in 12/10	3in 14/5 1	4in	5in 24/8	6in 31/6
			-		-	3ft do		do.	7/-	7/9 1	0/-	13/1	16/6
MET	TAL SU	NDRIFS	3			Shoe, ordinary Bend		do.	2/7 3/1	3/10 4/4	5/7	9/5 11/3	12/11
Cast iron pavement lights					per	Branch, single		do.	4/6	6/7	9/3	14/7	22/6
and convex lenses in alte	rnate ro	ws		33/-	t super	Offset, 44in		do.	3/9	5/3		12/11	17/-
Iron single fire doors, pane						Do. 9in	length.	do.	4/11	6/6		15/3 10/4	19/3
hung and self closing, to and lugged, to meet fire			Dateu	54/-	do.	H.R. gutter, 6ft Angle or nozzle	ength	do.	_	2/6	3/1	3/9	5/4
24 guage galvanized Ta	llboy 6		9in			Stop end		do.	-teate	9d	1/1	1/6	1/9
diameter with 9in by 12i		• •		55/-	each						Above	plus	221%

CURRENT MARKET PRICES (Continued)

PLASTER	ING MAT	ERIALS			COPPER T	TUBES—Extra
Sand, lime, cement and var under those heads— Metal lathing (‡in by 24G Plaster baseboard ‡in (1,20	ious plaste	rs are pro			Nominal bore	Internal wo Outside diameter C
Lath nails, galvanized Lath nails, galvanized White glazed tiles (6in by 6ir Do. rounded on one edge Do. on two adjoining edge	by (in)	small quantity	$ \begin{array}{c} 2/24 \\ 1/6 \\ 25/3s \\ 32/9 \\ 36/3 \end{array} $	lb q yard do, do.	in in lin lin liin liin	0.596 0.846 1.112 1.362 1.612
PLUM	BER'S GO	ODS			2in	2.128
			. 109/3	per cwt		RY TYPE CO
4lb lead sheet (in 1-ton lots) Lead water pipe in coils (do. Plumber's solder Copper tacks		• • • •	. 111/6 . 3/7 . 8/5	do. lb do.	All ends of	delivery and pa copper to copp
IRON SOIL AND WASTE				4in	Elbow	1/:
hin Medium pipe, 6ft length Do., 4ft length		14/6 17 10/5 12 5/4 6	/2 19/3 /2 13/7 /6 8/1	21/11 15/5 9/1	Brackets	(Brass) 2/
Do., with oval door Junction, single Do., with oval door		17/4 18 6/6 9 18/6 21	/6 21/1 /8 11/3 /8 24/3	24/7 13/3 26/3	English, fla	t drawn sheet
# in Medium pipe, 6ft length Do., 4ft length Bends Do., with oval door Junction, single Do., with oval door Swan necks, 4 in Do., 9in Holderbat, 2 in projection		6/6 10 8/8 11 5/9 5	/3 11/9 /9 13/9 /11 6/3	13/9 16/1 6/4	in square Figured roll sizes, in s	s led, white cut to quares (in)
GALVANIZED CISTERN (Less than three)					in Rolled,	n standard tint cut to size, in s ast do
each		gallo	ons		Georgian w	ed do ired do 1) do
CISTERNS Bends over tops and corner plates. Riveted or welded		Nominal				
14 gauge	100 162/- 197/- 225/-	150 246/- 305/- 356/-	309/- 360/- 418/-	427/- 485/- 568/-	Flashed Op	Cast do. al (15/18oz) up do. over
HOT WATER TANKS Riveted and with hand hole	20	25	30	40	Pot Opal do.	do. over (15/18oz) up do. ov
and ring	147/- 161/-	151/- 168/-	164/- 184/-	190/- 211/-		PLATE GLA
HOT WATER CYLINDER Riveted, with handhole an	d	25	33	30	Per Superfice In plates no	t exceeding:
ring	167/- 180/-	182/- 200/-	203/- 224/-	219/- 240/-	5ft do.	in each unless extra siz
PLUMBER'S BRASSWOR		Eacl			100ft do.	(do.) i.e., Plates ex
Boiler screws, single nut Do., double nut	‡in 1/7 2/3	∄in 2/1 2/10	1in 3/44 5/4	1\frac{1}{1}in 5/9 7/6	or 96in b	oth ways at hi
Boiler screws, single nut Do., double nut	1/2 2/5 13/11 14/11	1/7 3/- 21/9 23/3	1/11 4/1 —	2/1 7/3	Aluminium Distemper,	ceiling
Bib valves, crutch top screwed iron Do., but screwed boss Stop valves, screwed iron	8/6 9/8	12/6 14/2 10/3	_	-	Distemper, Enamel (eg Gold Metal Heat Resist	gshell) llic Paint
Do., screwed iron and union Do., double union Waste, plug chain and stay	9/3 10/6	13/6 15/-	27/9 30/- 8/6	9/6	Japan, black Knotting Linseed Oil	k (5gal)
Caps and screws Sleeves, long Do., short	_	1½in 5/6 4/-	2in 7/- 7/6 4/2	10/10 8/4		Paints (good c
Thimble	-	3/9 29/3	4/10	10/4	Undercoat Paperhange Petrifying li	r's Paste
Lead 7lb P. trap Do., S. trap Lead 6lb P. traps with 3in Do., but S. traps, do. Wire balloon guards, copp Do., galvanized iron, 2in	seal er, 2in, 2/7		1 in 9/- 11/1 9/3 11/7	2in 12/8 15/7 —	Size Teredine Turpentine Varnish, oa Do., do., oo Do., white,	k, copal inside utside use eggshell, flat
Hair felt 34in by 30in, 24o Boss white jointing compo Gasket 1/10 lb. Hemp, 9/	ound, 2/31b				White lead Whiting	mixed paint

COPPER	THIDEC	Entract	6	DC	CEDITORE	

	Internal v	work (sen	3cwt lots			
Nominal bore	Outside diameter	Gauge	Weight lb per ft	Price per 1b	Price per ft	
∳in	0.596	19	0.27	pence 442	12.13	
2in	0.846	19	0.39	431	16.82	
lin	1.112	18	0.62	411	25.81	
1‡in	1.362	18	0.76	41	31.16	
1 in	1.612	18	0.91	41	37.31	
2in	2.128	17	1.40	42%	59.68	

ONNECTIONS-

Add for delivery and packing on orders	under	£10.
--	-------	------

All ends coppe	r to c	opper					
Each		#in	∄in	lin	Hin	Lin	2in
Straight		1/51	1/10}	2/10%	4/01	8/01	11/63
Elbow		3/4	4/14	5/61	8/71	13/114	28/6
Tees		4/11	4/8	6,91	11/34	19/41	28 6
Brackets (Bras	(2	2/104	3/5	3/104	4/01	6/51	7/62

GLASS

					Per fe	oot supe	erficial
English, flat drawn	sheet	glass ci	it to s	izes	24oz	260z	32oz
in squares					1114	1/2}	1/64
Figured rolled, whit					1/28 Pe	er ft sur	
sizes, in squares (10	1/81	do.	
Ditto, but in standa	rd tints	3			2/14	do.	
in Rolled, cut to si	ze, in s	quares			1/21	do.	
in rough cast do.					1/5	do.	
in do. wired do.					1/91	do.	
Georgian wired do.					1/94	do.	
Fluted (No. 1) do.					1/81	do.	
#in Reeded				9 0	2/47d	do	
in Reedlyte (narrow	w and I	broad)	do.		1/7]	do	
Spotlyte do			* 0		1/71	do.	
in Calorex Cast do					1/8	do.	
Flashed Opal (15/18	oz) up	to lft	super		4/2	do.	
		1ft sup		0 0	5/-	do.	
Pot Opal (15/18					4/2	do.	
do. do.	OV	er 1 ft	super		5/-	do.	

ASS (Tariff) Cut to sizes.

Ordinary substance Per Superficial ft In plates not exceeding:	åin and	in th	nick.	(Genera	Glazing
2ft super in each	0.0					4/7
5ft do						5/7
45ft do. (unless extra	sizes)					6/9
100ft do. (do.)			* *			7/4
Extra sizes, i.e., Plates or 96in both ways at			super	or	160in	one way

RATING MATERIAL

					Price	Unit
Aluminium Paint					42/-	Gallon
Distemper, ceiling					39/-	Cwt
Distemper, washable	е				120/-	do.
Enamel (eggshell)					52/-	Gallon
Gold Metallic Paint					79/-	do.
Heat Resisting Pain	t				40/-	do.
Japan, black					35/-	do.
Knotting	0.4				40/-	do.
Linseed Oil (5gal)			0.0		16/9	do.
Boiled, do. (do		* *			17/6	do.
Proprietary Paints (good	class)-				
Finishing					57/6	do.
Priming (lead base)					57/6	do.
Undercoat					59/-	do.
Paperhanger's Paste				0.0	36/6	Cwt
Petrifying liquid					9/6	Gallon
Putty				* *	58/4	Cwt
		**			12/3	Firkin
TereBine					22/-	Gallon
Turpentine substitut					6/5	do.
Varnish, oak, copal		c use			39/-	do.
Do., do., outside us					41/-	do.
Do., white, eggshell					50/-	do.
White lead mixed po	aint				66/6	do.
White lead	0.0	0.4		2.4	167/6	Cwt
Whiting	0.0			9.0	13/3	do.



REINFORCED CONCRETE BUILDING STRUCTURES

SUMMERFIELD COMPANY

Our Structural Concrete Building Framework is available for normal Portal, Northlight and Multi-Storey buildings. We design, supply and erect all classes of precast framed building structures to suit Architect's exact requirements and to conform to Council Bye-Laws.

We are happy to submit schemes and competitive quotations promptly upon receipt of inquiries.

DESIGNED

SUPPLIED

ERECTED

ROOF CLADDING ETC.

PJ

HIVON LANE. T. HOODESDON, HERTS.

Landon Office: 55 Gordon Square, W.C.I

Promis Children

(LONDON) LTD.



BLUE HAWK

sparkling, plastic-covered ceiling and wall tiles

Bright colourful ceilings . . . gay attractive walls . . . patterns that can be arranged and re-arranged at will . . . Blue Hawk VARITILES bring extra depth and warmth to every room.

Simple to fit – just screw in runners, slide in tiles and the job's done; fully insulating and fire-resistant; padded and plastic-covered—VARITILES can be fitted to new or existing ceilings and need only a wipe to keep clean.

In addition to ceilings and walls in the home, VARITILES have many other applications – in offices, schools, cinema and theatre foyers, shops and stores, restaurants and cafes etc.

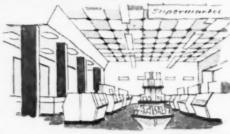
Send for leaflet giving full details of VARITILES

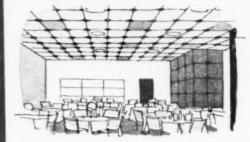
BRITISH PLASTER BOARD

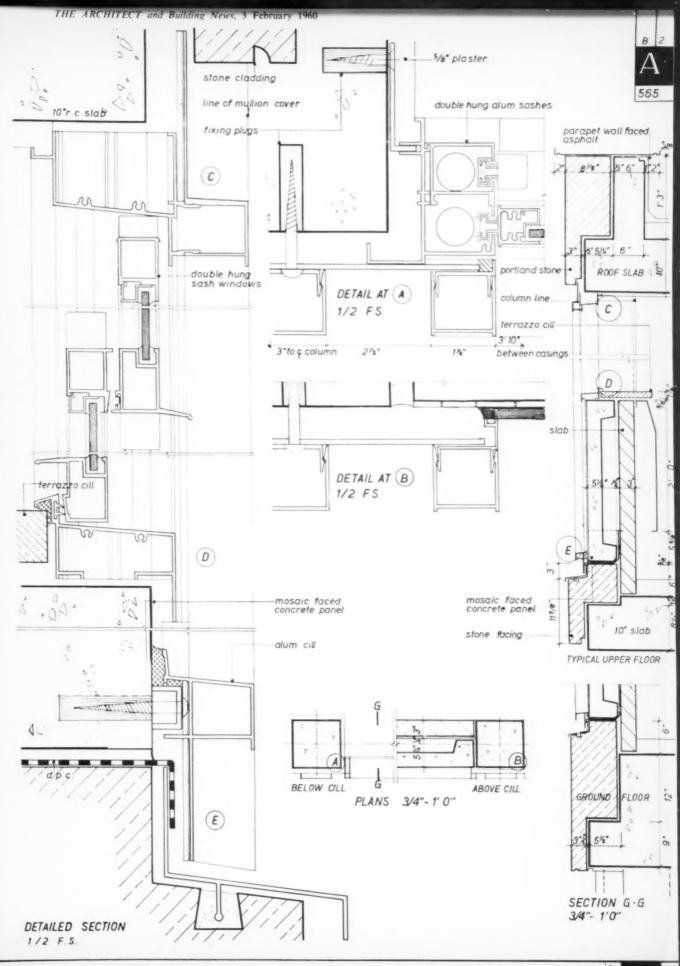
BATH HOUSE BY PICCADILLY, LONDON, W. I. TELEPHONE: GROSVENOR EIII.







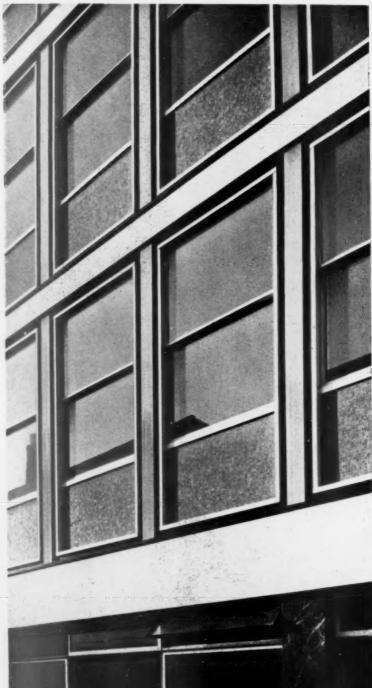




WALL DETAILS, OFFICES, FITZROY STREET, LONDON, W.I

The Cartwright Estate consists of several office blocks in Charlotte Street and Fitzroy Street, the same elevational treatment having been used for all. Above the ground floor the concrete mullions are faced with aluminium and painted blue grey. The windows which are in the form of double hung sashes in aluminium are painted white, the aluminium flashings are painted black. The spandrel panels above the ground floor are precast concrete panels faced with glass mosaic in grey green, lavender and white. The ground floor and basement spandrels are in double glazing filled with white glass fibres, and the columns are faced in marble. The architects are C. H. Elsom and Partners







Lighting and Learning

New light on old masters. Modern lighting technique enhances the paintings in the main gallery of Fine Art at Nottingham University's new Portland building.

A luminous ceiling is combined with specially designed 5 ft. fluorescent picture light fittings with Osram warm white tubes.

G.E.C. collaborated with the architects, Cecil Howitt & Partners, and Sir Hugh Casson, who was responsible for interior decoration, in creating lighting schemes for the whole of this building.



S.E.C.
LIGHTING DIVISION

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

Sadde-Tush Doors

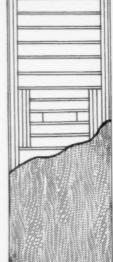
For public buildings, offices, houses, flats. Sanded to a fine finish for painting and with careful attention to the veneers for polishing.

Robust and reliable under rigorous conditions of wear.

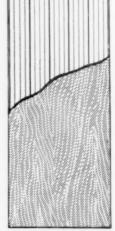
Timber core infilling machined and assembled by precision methods in our modern factory.

All facings and edge lippings are secured to the core with waterproof Urea Formaldehyde adhesive.

The rails and girders are stub-tenoned into grooved styles.



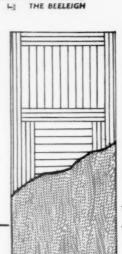
THE GOLDHANGER





High-Grade WOOD WINDOWS

CASEMENT PIVOT HUNG SLIDING SASH



THE CHELMER

THE MALDON

ALSO KITCHEN UNITS AND STAIRCASES



EAST WHARF, MALDON, ESSEX. Telephone Maldon 941

LONDON OFFICE, Bank Chambers, 329 High Holborn, W.C.I. Telephone CHAncery 7214



INDUSTRIAL ENGINEERING LTD

The roof specialists

As specialists for over forty years in the construction, reconstruction, maintenance and waterproofing of industrial roofs, we are able to offer the architect a complete service designed to relieve him of every worry.

- * The complete roofing contract can be placed with us, eliminating the need for dealing with several subcontractors.
- A number of highly specialised technical departments are always at your disposal for consultation and advice,
- * Operational staff readily available to deal with emergencies at short notice.
- * Complete surveys can be carried out and estimates submitted without cost or obligation.

Branch offices throughout the country

INDUSTRIAL ENGINEERING LIMITED, VOGUE HOUSE, HANOVER SQUARE, LONDON W.1. HYDe PARK 1411 (7 LINES)

or consult your local telephone directory

Modernise with

HARD COKE

for high-efficiency Domestic Heat Services . . . with ECONOMY

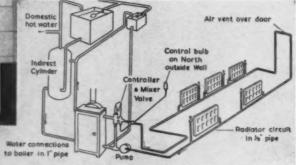


with hot water supply, is much less costly to install than the conventional gravity system, particularly in existing houses. It can also be much cheaper to run, no heat being wasted in the roof space or under floors. Piping of ½" bore is used, with a circulating pump; this can provide better control of the heating than with gravity circulation. The small-bore system is admirably suited to medium-sized houses (1,000 to 1,500 sq ft) and for flats in converted houses. It makes central heating a practicable proposition for those who might otherwise not be able to afford it.

The "small-bore" system of central heating,

Above: Boiler, fired with Hard Coke, serving a small bore system. The circulating pump can be seen inside the airing cupboard.

Alongside: Typical small bore system.



SEND FOR THE BOOKLET MODERNISE WITH HARD COKE

MODERNISE WITH HARD COKE

This booklet illustrates and describes a range of typical modern high-efficiency solid fuel appliances and gives full information on Hard Coke and its use. Free on application.

HARD COKE is the authorised smokeless fuel made by the British Coking Industry. It is made in coke ovens from specially selected coal which is washed and crushed before carbonisation. Users prefer it because it is uniformly sized, consistent in quality and contains no stone or shale. It has outstanding advantages for:

THE BRITISH COKING INDUSTRY ASSOCIATION, 74 GROSVENOR STREET, LONDON, W.I

Telephone: MAYfair 9736

Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the

MULLEN

LUMSDEN

Contractors and Joinery

Specialists

41 EAGLE STREET, HOLBORN

LONDON, W.C.1

Telephone: CHAncery 7422/3/4

ALL TIES : MASONRY FIXINGS

S. J. BRIERLEY (WILTS) LTD

BRADFORD-ON-AVON

Telephone 2234

Southampton Tel. No. 73176

5 Coptic Street, W.C.1. Tel.: Museum 3705

CONTRACT NEWS

OPEN

BUILDING

BAGSHOT R.C. (a) Construction of a sewage, pumping and incidental works at New Road, Windlesham. (b) Engineer and Surveyor, Council Offices. (c) 2gn. (e) February 13.

BARNSLEY B.C. (a) Erection of traditional dwellings at St. Helen's housing estate, comprising 33 pairs of three-bedroom houses, ten pairs of two-bedroom houses and seven pairs of onebedroom houses (100 dwellings). Contracts S.H.4. (b) Borough Engineer, Town Hall. (c) 2gn. (e) February 16.

BIRKENHEAD B.C. (a) Erection of 46 dwellings, 14 shops, 11 garages, at Prenton Dell estate, contract 11. (b) Borough Architect, 3 Conway Street, Birkenhead. (c) 2gn. (e) February 16.

BOLLINGTON U.C. (a) Erection of 28 bungalows with roads, sewers and water mains at Bollington Cross. (b) Engineers and Surveyors, Council Offices, Macclesfield. (c) 2gn. (e) February 15.

BURTON-ON-TRENT B.C. (a) Erection of a gymnasium and changing rooms at Anglesey Secondary School. (b) Borough Architect, Town Hall. (c) 2gn. (d) February 7. (e) March 9.

CARDIFF C.C. (a) Alterations and additions at Cardiff High School for Boys, Newport Road. (b) City Architect, City Hall. (c) 2gn. (e) February 17.

CARDIFF C.C. (a) Construction of a public convenience and store at Maundy Stadium, North Road. (b) City Archi-tect, City Hall. (c) 2gn. (e) February 17.

CONWAY B.C. (a) Demolition of existing conveniences and erection of a block of public conveniences at Marine Crescent, Deganwy, approximately 417 sq ft in floor area. (b) Borough Engineer, Bodlondeb, Conway. (c) 2gn. (e) February 11.

CROYDON B.C. (a) Construction of a swimming bath, kitchen and hall at St. Giles Special School, Featherbed Lane, Addington. (b) Chief Education Officer, Katherine Street, Croydon. (c) £1. (e) March 1.

CROYDON B.C. (a) Erection of a kitchen and dining room at Gonville School, Thornton Heath. (b) Chief Education Officer, Katherine Street, Croydon, (c) £1. (e) February 23.

CROYDON B.C. (a) Erection of a new hostel on Ashburton estate. (b) Borough Engineer, Town Hall. (e) February 17.

EAST RIDING OF YORKSHIRE C.C. (a) Erection of an assembly hall, area 3,075 super ft, at The Institute of Agriculture, Bishop Burton, near Beverley. (c) £2. (e) March 1.

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.



WYKAMOL Wood Borer Insecticide

RESKOL

Dry Rot Fungicide

Write for full particulars of these completely effective materials and specialist survey and guaranteed treatment services. Pressure spray apparatus for the application of our materials is available for hire at nominal rates.

RICHARDSON & STARLING LTD

(Dept. A.B.N.), 6 Southampton Place, W.C.I

A. & P. STEVEN LTD

181 ST. JAMES RD., GLASGOW, C.4

181 S1, JAMES R.D., Charles C., Charles C., Charles C., Charles C., Charles C., Charles St. Tel. Waterloo 4465
Manchester. 1: 3 Charles St. Tel. Ardwick 1391
EDINBURGH, 2: 2 North West Circus Place.
Tel. Caledonian 2095
Tel. Caledonian 1995
Lane.

BIRMINGHAM, 20: Henley Lodge, 19 Church Lane, Handsworth Wood, Tel. Northern 0284

& DRY ROT destroying insects timbers, flooring

ARCHITECTURAL METALWORK

THE MODERN VENETIANS

Full particulars, drawings, etc., from

DANAURA LIMITED

48 Notting Hill Gate, London, W.11 BAYswater 8721/2



HOTCHKISS ENGINEERS LIMITED EASTBOURNE . Tel. 2424.7 lines

The Stainless Steel Sink Co. Ltd.

Manufacturers of



Head Office: Ring Road, Lower Wortley, Leeds, 12 London Office: 14 Great Peter Street, S.W.1

EAST SUFFOLK C.C. (a) Site works, foundations, services, etc., in connection with a prefabricated timber four-class primary school at Bradwell, Great Yarmouth, alterations. (b) County Architect. County Hall, Ipswich. (d) February 8. (e) March 11.

EIRE, BALBRIGGAN. (a) Erection of a new factory, office block, stores, garages and ancillary site works, at Balbriggan, Co. Dublin, for Messrs. Wavin Pipes Ltd. (b) Mr. Thomas C. Whelan, National Bank Chambers, 1/2 Cavendish Row, Dublin, C.16. (c) £50. (e) February 16.

EIRE, CORK C.C. (a) Structural alterations and incidental building work at Heatherside Hospital for Cork County Council. (b) Documents from the Secretary, Cork County Council, Annabella. Mallow, Co. Cork, on payment of £5 per set. (c) £25. (e) February 6.

EIRE, CORPORATION OF DUN LAOGHAIRE. (a) Construction of Ejector Station at Brighton Vale (off Scapoint Avenue), Blackrock, for Corporation of Dun Laoghaire. (b) Town Clerk, Town Hall, Dun Laoghaire. (c) 10gn. (e) February 6.

EIRE, CROSSHAVEN. (a) Erection of a dispensary at Crosshaven, Co. Cork, for South Cork Board of Assistance. (b) Board's Secretary, 6 George's Quay, Cork. (c) £5. (e) February 12.

EIRE, DUBLIN CORPORATION. (a) Reconstruction of the existing carriage-way at Fairview from Annesley Bridge to the junction with Merville Avenue for Dublin Corporation. (b) City Treasurer, Exchange Buildings, Lord Edward Street, Dublin. (c) 5gn. (e) February 12.

EIRE, TULLAMORE. (a) Erection and completion of proposed Boys' National School at Tullamore, Co. Offaly, for Very Reverend W. Moran, P.P., St. Brigid's, Tullamore, Co. Offaly, (b) J. R. Boyd Barrett, 5 Camden Place, Cork. (c) 10gn. (e) February 12.

FLINT B.C. (a) Erection of 20 Homeville dwellings at Prince of Wales Avenue. (b) Borough Engineer and Surveyor, Municipal Offices, Earl Street, Flint. (c) 2gn. (e) February 15.

GLAMORGAN C.C. (a) (1) Two pairs of police houses at Coychurch; (2) One pair of police houses at Gwernifor estate, Mountain Ash. (b) County Police Architects' Department, Bridgend. (c) 2gn. (e) February 8.

GOSPORT B.C. (a) Construction of public conveniences at Lee-on-Solent. (b) Borough Engineer, the Hall, Haslar Road. (c) 2gn. (e) February 23.

GRAVESEND B.C. (a) Erection of 56 flats and maisonnettes at the junction of Queen Street and The Terrace. (b) Town Clerk, Municipal Offices, Woodville Terrace. (d) February 8.

GRIMSBY B.C. (a) (1) General building contract including foundations, boiler-house and superstructure works at Have-lock secondary school, with roads, drainage, etc.; (2) Heating and hot-water installations, including oil-fired boiler plant; (3) Electrical installation. (b) Borough Engineer and Architect, Municipal Offices, Town Hall. (c) £5 each contract. (e) February 13.

GRIMSBY B.C. (a) (1) General building contract including foundations, boiler house and superstructure works to the main two-storey and subsidiary single-storey blocks, with roads, paths, drainage, etc., at Grantham Avenue primary junior school; (2) Heating and hot-water installations with oil-fired boiler plant; (3) Electrical installations. (b) Borough Engineer and Architect, Municipal Offices. (c) £5 each contract. (e) February 13.

HAMBLEDON R.C. (a) Alterations to Ellens Green School House, Ewhurst. (b) Engineer and Surveyor, Council Offices, Bury Fields, Guildford. (e) February 8.

HAMPSHIRE C.C. (a) Erection of Denmead new county junior and infants' school in traditional construction, comprising four classrooms, staff and toilet accommodation. (b) County Architect, The Castle, Winchester. (c) 2gn. (d) February 11. (e) March 10.

HOLLAND C.C. (a) Erection of a twoform entry, plus one classroom instalment of a three-form entry school at Old Leake, near Boston, Lincs. (b) County Architect, County Hall, Lincoln. (c) 2gn. (d) Immediately. (e) February 22.

HORNSEY B.C. (a) External and internal decorations at various schools. (b) Borough Engineer and Surveyor, Town Hall, N.8. (e) February 22.

HUDDERSFIELD B.C. (a) Erection at Station Road. (1) Two-storey stores and workshop building, 140ft long, 30ft wide and 33ft high, with steel frame and brick and concrete construction; (2) Two-storey canteen and welfare building, 80ft long, 39ft wide and 30ft high; (3) Renovation and conversion of existing building; (4) Miscellaneous works, road works and drainage. (b) Borough Engineer and Surveyor, High Street Buildings. (c) £10.

HUNTINGDON R.C. (a) Erection of six bungalows at Great Gidding. (b) Surveyor, Montagu House, Huntingdon. (c) 2gn. (e) February 24.

LANARKSHIRE FIRE BRIGADE JOINT COMMITTEE. (a) Erection of a fire station at Shotts. Separate trades. (b) Gavin Paterson & Son, 6 Cadzow Street, Hamilton. (e) February 10.

LINCS C.C. (a) Extensions for temporary use of Grantham Huntingtower Road C.P. school. (b) County Architect, County Offices, Sleaford. (d) February 3 (today). (e) February 22.

LIVERPOOL C.C. (a) Construction of an electrical substation at Fazackerley Cottage Homes, Liverpool, 10. (b) City Engineer and Surveyor, Municipal Buildings, 2. (e) February 15.

LUTON B.C. (a) Erection of two twostorey blocks of ten one-room old people's dwellings at Farley Hill. (b) Borough Architect, Town Hall. (e) February 19.

MABLETHORPE AND SUTTON U.C. (a) Construction of Foreshore administration block with public lavatories, and eight shops, with public shelters on the Central Promenade, Mablethorpe. (b) Council Offices, Mablethorpe. (c) 3gn. (e) February 13.

MANCHESTER C.C. (a) (1) Erection of a combined clinic at Plant Hill Road, Blackley; (2) Combined clinic at Charlestown, Blackley; (3) Day nursery at Daisy Bank Road, Victoria Park. (b) City Architect, P.O. Box 488, Town Hall. (e) February 10.

MID-WALES HOSPITAL MANAGE-MENT COMMITTEE. (a) Firms wishing to be included in the committee's list for various hospitals should apply to the Group Secretary, 31 North Parade, Aberystwyth. (d) February 8.

NEWCASTLE-ON-TYNE C.C. (a) Erection of a public convenience at Walker Park and one in Nuns Moor Park. (b) City Engineer, Town Hall. (e) February 8.

NORTHFLEET U.C. (a) Erection of 20 houses in traditional brick construction on Painters Ash estate. (b) Engineer and Surveyor, Town Hall. (c) 2gn. (e) February 12.

NORTH RIDING OF YORKSHIRE C.C. (a) Conversion of outbuildings at Gillamoor (C.E.) School, near Kirby Moorside. (b) F. Barraclough, County Hall, Northallerton. (d) February 19.

PORTSMOUTH C.C. (a) Erection of a teaching block and boilerhouse and conversion of Foster Hall at the Portsmouth Training College. (b) Gollins, Melvin, Ward & Partners, architects, 15 Manchester Square, London, W.1. (c) £1. (d) February 8.

RADCLIFFE B.C. (a) Extension of the public library, (b) Borough Engineer and Surveyor, Town Hall. (c) 2gn. (e) February 16.

REIGATE B.C. (a) Erection of one block of 12 four-storey maisonnettes and one block of 14 four-storey maisonnettes with stores under, at the Dome Estate. North Street, Redhill. (b) Borough Surveyor, Town Hall, Reigate. (c) 2gn. (e) February 18.

ROCHESTER C.C. (a) Erection of 26 three-bedroom houses and 12 flats at Warren Wood Development, Stage IV. (b) City Surveyor, 66 Maidstone Road, Rochester. (c) 3gn. (e) March 7.

SOUTHAMPTON B.C. (a) Erection of a central health clinic at East Park Terrace, Phase I, three-storey block. (b) Borough Architect, Civic Centre. (d) February 6. (e) March 7,

SOUTH SHIELDS B.C. (a) Erection of combined public convenience and electricity substation at Station Approach. (b) Borough Engineer, Town Hall. (c) 2gn. (e) February 16.

SOUTHWELL R.C. (a) Erection of 11 pairs of houses at Abbott Crescent, Farnsfield, with site works. (b) Architect and Surveyor, 7 Westgate, Southwell. (c) 2gn. (e) February 22.

ST. ALBANS R.C. (a) Improvements to 58 houses at Redbourn, bringing them up to standard. Should be of interest to small builders. (b) Clerk of the Council, 43 Upper Lattimore Road, St. Albans. (d) February 5.

STORNAWAY PIER AND HARBOUR COMMISSION. (a) Construction of a steel-framed transit shed with a floor area of 9,000 sq ft at King Edward Wharf, Stornaway Harbour. (b) Grafton & McLean, 21 Woodside Terrace, Glasgow. (d) February 4. Works include concrete, brick, etc. Joiner, glazier and ironmonger. Roughcast, plumber and painter. Aluminium roof decking. Electrical.

SUNDERLAND B.C. (a) Extensions to the Southmoor Technical School. (b) Borough Architect, Grange House, Stockton Road. (c) 2gn. (e) February 12.

SWINDON B.C. (a) Erection of 21 old people's dwellings at Walcot. (b) Borough Architect, Civic Offices. (d) February 19.

WORCESTER C.C. (a) Additional sanitary accommodation at Hillborough Home for the Aged, Tallow Hill, comprising two three-storey blocks, with minor alterations. (b) City Engineer and Surveyor, 22 Bridge Street, Worcester. (c) 3gn. (e) February 29.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

BARNSLEY. (1) Hospital for the chronic sick. (2) Mount Vernon. (3) Mitchell Construction Co. Ltd., Peterborough. (4) £224.062.

BRISTOL. (1) Erection of a four-storey office block. (2) 33-35 Queen's Square. (3) John Knox (Bristol) Ltd., Winterstoke Road. Bristol.

DARLINGTON B.C. (1) 164 houses. (2) Lingfield estate. (3) F. Shepherd & Sons Ltd., Blue Bridge Lane, York. (4) £245.036.

DERBY. (1) Extensions to departmental stores for Ranby's. (3) Ford & Western Ltd., Osmaston Road, Derby. (4) £250.000. EDINBURGH. (1) Erection of a research, manufacturing and development factory for Ferranti Ltd. (2) Crewe Toll, Ferry Road. (3) Crudens Ltd., Olive Bank, Musselburgh. (4) £150,000.

HENDON, N.W. (1) Erection of 33 married officers' quarters. (2) Hendon Aerodrome. (3) George Wimpey & Co. Ltd., Hammersmith, W.6. (4) £107,893.

HENDON N.W. (1) Erection of flats. (2) New Brent Street. (3) George Wimpey & Co. Ltd., Hammersmith, W.6. (3) £104,272.

LONDON, W. (1) Block of offices for Landis & Gyr Ltd. (2) Victoria Road, Acton, W. (3) Howard Farrow Ltd., Russell Parade, Golders Green, London, N.W.11. (4) £100,000. Work begun.

PUDLO

BRAND Trade Ma

CEMENT WATERPROOFING POWDER

USED IN PORTLAND CEMENT CONCRETE AND RENDERINGS TO EXCLUDE OR RETAIN WATER

WRITE FOR DIRECTIONS BOOK

To:

KERNER-GREENWOOD & CO., LTD.

Sole Proprietors and Manufacturers

THE MOST RELIABLE FIRE CEMENT IS 'FEUSOL'—have you tried it?

FIBROUS PLASTERWORK OF EVERY DESCRIPTION ALLIED GUILDS

King Edward Square
SUTTON COLDFIELD Tel.: Sut 3809

MANCHESTER. (1) Development for Unicos Property Corporation Ltd. (2) Market Street and Corporation Street. (3) Henry Matthews & Sons (Builders) Ltd., Oldham Street, Denton, Manchester.

NORTHAMPTON. (1) Redevelopment for New Peacock Ltd. (2) Peacock Hotel site, Market Square. (3) Bernard Sunley & Sons Ltd., Berkeley Square, London, W.I. (4) £140,000.

OLDBURY B.C. (1) Erection of 120 flats in a ten-storey construction. (2) Langley. (3) A. Kendrick & Co. Ltd., Walsall, Staffs. (4) £292,965.

RENFREWSHIRE. (1) Erection of large factory extensions for India Tyre & Rubber Co. Ltd. (2) Inchinnan. (3) Drummond Lithgow & Co., 176 Bath Street, Glasgow.

SOUTHAMPTON. (1) Office block for Grosvenor House (Southampton) Ltd. (2) Cumberland Place. (3) Tersons Ltd., 4 Dollis Park, Finchley, N.3. (4) £230,000.

SOUTHEND-ON-SEA B.C. (1) Erection of new police headquarters. (2) Victoria Avenue. (3) Gray, Conoley & Co. Ltd., 29 Stephenson Street, London, E.16. (4) £238,141.

SWANSEA B.C. (1) Erection of 152 flats and maisonnettes. (2) Clase and Penlan estates. (3) Stone & Co. (Bristol) Ltd., Redland Road, Bristol. (4) £307,336.

SWINDON. (1) Erection of a factory for Deloro Stellite Ltd. (2) Parsonage Farm. Stratton St. Margaret. (3) Higgs & Hill Ltd., Crown Works, South Lambeth Road, London, S.W.8. (4) £500,000.

WARMLEY R.C. (1) Erection of 143 houses and flats. (2) Blackhorse Lane. (3) John Laing & Son Ltd., Mill Hill, London, N.W.7. (4) £224,460.

WESTON-SUPER-MARE B.C. (1) Erection of six three-storey blocks containing 65 maisonnettes and flats. (2) Bournville Estate. (3) John Laing & Son Ltd., Mill Hill, London, N.W.7. (4) £109,432.

TERRAZZO in situ or Precast TOLLET PARTITIONS & Posts STAIRCASE Treads, Risers, etc. GLASS, CERAMIC & MARBLE MOSAIC

VENTOR TERRAZZO & MOSAIC
CO., LTD.

FAIRFAX WORKS, 156/158 FAIRFAX ROAD, GREEN LANES, LONDON, N.8 MOUNTVIEW 2229 (2 lines)



"SYSTON" Rolling Shutters

MANUFACTURED IN STEEL, WOOD & ALUMINIUM
GALVANISED SHUTTERS AND SERVERY
HATCHES TO SUIT ALL REQUIREMENTS

SHUTTER CONTRACTORS TO WAR DEPARTMENT AND AIR MINISTRY

J. TAYLOR (SYSTON) LTD. • SYSTON • LEICESTER
TELEPHONE: SYSTON 2133 • MANCHESTER OFFICE: RINGWAY 3996

A. W. BAKER

WALL AND FLOOR TILING

CONTRACTORS AND MERCHANTS
Service, Satisfaction and Personal Supervision
68 HEREFORD RD., FELTHAM, MIDDLESEX

Telephone : FELTHAM 3941

THOMAS CRAPPER

& CO., LTD.

Merchants of Sanitary Appliances Kitchen Equipment and Plumbing Fittings Catalogue on request

120 KINGS ROAD, S.W.3. KEN. 4831

Specialists in

STAINLESS STEEL FABRICATIONS

Built to your requirements or from a wide range of standards

Expertly mode and beautifully finished Metal Craftsmen

Associated Metal Works

Telephone: BELL 2004/6
Telegrams: "STAINLESS, GLASGOW"

10 ST. ANDREW'S SQUARE, GLASGOW, C.1
LONDON: 7 GROSVENOR GARDENS, S.W.1. Phone: VICTORIA 1977/8
And at LIVERPOOL . BIRMINGHAM . NEWCASTLE . MANCHESTER . BELFAST . DUBLIN



Photograph by courtesy of Quaker Oats Ltd.

rubber flooring by MORRIS

The photograph shows one of the 'Greyhound' patterns in rubber flooring as laid in the offices of Quaker Oats Ltd. by G. C. Constructional Flooring Co. Ltd., Richmond. 'Greyhound' is available in thirty-seven designs, five sizes and four thicknesses.

Rubber flooring tiles designed and produced by Morris Rubber Industries Ltd., combine an inbred resistance to wear with an outward appearance which looks well in all kinds of surroundings. Available in many attractive colours and patterns, warm, hygienic, quiet and resilient, Morris Rubber Tiles will satisfy the architects' need for hard-wearing floor covering wherever people work and live.

Please let us send you more detailed information about Morris Rubber Flooring and, when in London, see our exhibit at The Building Centre, 26 Store Street, W.C.I.

Selected by The Council of Industrial Design for exhibition in The Design Centre.

MORRIS

MORRIS RUBBER INDUSTRIES LIMITED

High Road : Byfleet : Surrey

Telephone: BYFLEET 4351/3.

Telegrams: RUBBER, BYFLEET







The Concrete Dust Ogre can rise from almost any concrete or grano floor. The safe and sure way to kill him at any age is to treat the floor once only with Watco Concrete Hardener. Economical because Watco treatment lasts as long as the floor, while the floor itself becomes up to nine times tougher, and highly resistant to most kinds of spillage. Watco is not chemical, and has special advantages in the fields of electronics and nuclear energy.

Concrete Floors need WATCO CONCRETE HARDENER

Full information from

WATCO (SALES) LTD (Dept. 5)

Floor Treatment Specialists

56 BUCKINGHAM GATE, LONDON, SWI

VICtoria 0623

CASE RECORDS FROM THORNS FILES . . . I

Jobs like this



versatility...
speed...
economy...

Photographs by courtesy of Hart's Holiday Club, Leysdown, Isle of Sheppey.

This client wanted a club-house building erected at very short notice. THORNS were able to match his requirements closely from their range of standard designs.

Manufacture began at once from existing drawings. By the time the site was ready, an erection team was on hand with the prefabricated sections. Plumbing and electrical services were co-ordinated with the structural work.

In less than two months from the receipt of the order, the building was in use.

The approximate price is available to bona fide enquirers.

THORNS

THORNS' prefabricated buildings, as used at Hart's Holiday Club, are available in basic widths of 10', 12', 15', 20', 30' and 40', in any length, and in traditional or modern designs.

THORNS will undertake the complete job, including all sitework; or will erect buildings on a prepared site; or, if desired, will supply the buildings for erection by the client's own labour, with or without THORNS' supervision.

Catalogue of designs and prices on request.

Ask THORNS to quote on your job.

J. THORN & SONS LTD. (Dept. 113), BRAMPTON ROAD, BEXLEYHEATH, KENT



Our Beam system gives a maximum of standardization to obtain economy and yet at the same time allows complete freedom to architectural planning.

SOMMERFELDS

LATTICE BEAMS

These beams are widely used in the modern planning of factories, school classrooms, offices, canteens, etc., where spans of 20'0" to 40'0" are encountered. They are most economic for all light roofing, combine well with the many prefabricated slabs which span directly between supporting joists.

AND OF COURSE STANCHIONS

Type W. Welded Bo

ECONOMY

RIGIDITY

PROMPT DELIVERY

Our Structural Design Office are pleased to advise and quote for THE COMPLETE STEELWORK OF ANY PROJECT. Please write for full details and data sheets.

Head Office: WELLINGTON SHROPSHIRE ENGLAND Tel: Wellington 1000 London Office: 167 VICTORIA ST LONDON S.W.I. Tel: Vic 8843 & 1000







One person's accom., open, and showing 3 POINT LATCHING 72" x 15" wide x 20" deep.
Also other sizes.

Helmsman

L CLOTHES M LOCKER (Pat. No. 699842)



W·B·Bawn

Byron Works, Blackhorse Lane, London, E. 17. Telephone, LARkswood 4411/4 Please send me, free, illustrated literature of the comprehensive range of "Helmsman" steel Clothes Lockers.

Address

(B)

DAMP PROOF COURSES with REDUCED LABOUR COSTS

THE ONE-COAT WAY

NON-CRACKING · CONTINUOUS WATERPROOF · BITUMINOUS

with SEM

SEMI-MASTIC 'E' (for dry surfaces)
SEMI-MASTIC '197' (for damp surfaces)

NO HEATING READY FOR USE EASY TO APPLY BRUSH OR FLOAT

THE MANUFACTERERS OF:

RITO for Joints • RITOLASTIC Coatings for Protection • ROMANITE for dampwalls

ANDREW MAXWELL DIVISION

MAXWELL HOUSE . ST. PAULS SQUARE . LIVERPOO



SHE COULD HAVE TAKEN IT FOR GRANTED

In her job, she has to be certain. But she could have assumed that the water temperature was just right, since it is controlled by a

"Security" Thermostatic Mixing Valve the choice of the leading Hospitals.

And it is just as useful for Hotels, Schools, Industrial Facilities and indeed all multiple installations.



GUMMERS LTD

EFFINGHAM VALVE WORKS ROTHERHAM

Telephone: ROTHERHAM 4865-6-7 Telegrams: GUMMER, ROTHERHAM

London Office: 38 Victoria St., London S.W.1 Telephone: London ABBey 6473

AUTOMATIC SUPERVISION

ensures accurate and uniform time of Clocks, Attendance Time Recorders and all Time Equipment on the circuit in your building, by the verification of the receipt of sixty minute impulses every hour.

> This is an exclusive feature of the **IBM International Superelectric** Master Clock Time System.

For further information please ask for illustrated booklet describing this System. "THE ODD MINUTE" ref. J. 708-4

IBM UNITED KINGDOM LIMITED

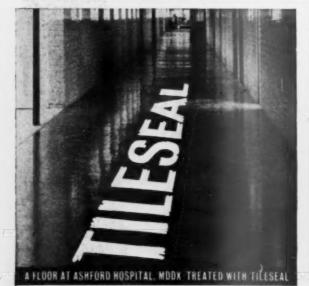
International Time Recording Division 8 Berkeley Square, London, W.I. Tel.: Mayfair 2004

EQUIPMENT TIME

ELECTRIC TYPEWRITERS

DATA PROCESSING

TIME RECORDING



FREE- THE KNOW-HOW THAT KEEPS THE SHINE ON THIS FLOOR

This floor was treated with Bourne Tileseal one of the new FTL liquid floor treatments. Tileseal gives a lasting stain-resistant shine without daily polishing—whatever the traffic conditions. Tileseal is suitable for thermoplastic tiles, linoleum and similar types of floor. Where a fully burnishable emulsion polish is required, deep-lustre Tilegloss should be used. But it's not just the treatment that gets results like this. It's know-how. The FTL Advisory Service have met and solved every

type of floor care problem there is. They'll solve yours—free and without obligation.

FLOOR TREATMENTS LTD · HIGH WYCOMBE · BUCKS Tel: High Wycombe 4214





STRUCTURAL STEELWORK for INDUSTRIAL PROJECTS ROOF TRUSSES 15'0' to 100' 0' SPAN

As specialists in roof truss design and fabrication we welcome inquiries for frameworks to suit standard or non-standard types of roof covering. Illustrated brochure available on application

THE NORTHARC ORGANISATION LTD. 260, LANGHAM ROAD, TURNPIKE LANE, LONDON, N.15. PHONE BOWES PARK 3757



or folds ... or goes round the corner ...

and it's a door - call in KING

The huge range of KING door gear is backed by a Technical Advisory Service second to none. Whatever the kind of door, whatever the door problem, KING's can answer it. If it slides, or folds or goes round the corner,

whether it's a domestic door or a power operated giant-call in KING's.

Remember, too, the KING's service is such that a representative will be pleased to call on you any time, anywhere in the world.



DOOR GEAR CRAFTSMEN FOR 40 YEARS

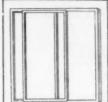
Write for literature to:

GEO. W. KING LTD., 224 ARGYLE WORKS, STEVENAGE, HERTS. Telephone: Stevenage 440

Real progress in ventilation

New Art Block, Charterhouse School, Godalming.

Horizontal Sliding Windows Supplied in dimensions up to 4 ft in height by 11 ft or equivalent area.





Top-hung Ventilators Sizes to suit apertures up to 7 ft wide.

Architect: James Dartford, A.R.I.B.A.

For further details of Quicktho windows write or telephone to our Technical Department.

Building progress can be measured in terms of time and cost and quality. By these standards Quicktho windows possess important advantages over more traditional designs.

The Quicktho Horizontal Sliding Windows and Top-Hung Ventilators used in this school block are functionally planned for maximum light and adjustable ventilation. Made in high corrosion resisting aluminium alloy and factory glazed.

NGINEERING

5 GRAFTON STREET LONDON W.I. Telephone and Telegrams: Hyde Park 1806/7



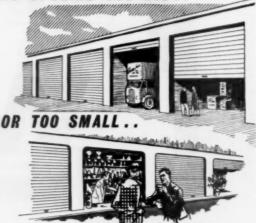
"> Small & Parkes Ltd. (Stairtreads Dept.), Manchester 9
PLEASE SEND ME YOUR ILLUSTRATED CATALOGUE
GIVING DETAILS OF NOSINGS, COLOURS & DIMENSIONS
OF DON STAIRTREADS—and names of depots and suppliers.

NAME

ADDRESS

SMALL & PARKES LTD • Hendham Vale Works • Manchester 9 Lendon: 251 Kingston Road, London, S.W.19 CHErrywood 3806/7 A.B.38





FOR

Thornborough

... transport depots or hars garages or shop fronts ... Thornborough roller shutters can be fitted to any opening. They are available in steel, wood or aluminium, hand gear or electrically operated. Write for literature 3

THORNBOROUGH & SON (MANCHESTER) LTD St. Vincent St., Ancoats, Manchester 4. Tel. COLlyhurst 2887 London: Vale Works, Twickenham, Middx. Tel. Popesgrove 0797

Representative for Northern Ireland:

OSWALD McMULLEN, 6 Sussex Place, Belfast. Tel.: 29126



CYCLE STAND TO SUIT

ABIX Cycle Stands are constructed of steel throughout, stove-enamelled green. Roof sheeting is normally of galvanized corrugated sheets. If required, sheeting can be supplied in Aluminium or Asbestos.

Please write for illustrated catalogue ABN/1 to:



There are 30 Different Types from which to choose



BIX (METAL INDUSTRIES) LTD.

STEEL FOUIPMENT FOR OFFICE & FACTORY
POOL ROAD, WEST MOLESEY, SURREY

Phone: MOLesey 4341/3

Grams: ABIX, E. MOLESEY

RENown 5474

MANDER & GERMAIN

LIMITED

Architectural Craftsmen

MARBLE · STONE · GRANITE
FLOORS · WALL LINING · CHIMNEY PIECES · ETC.

WILLOWBANK WHARF PUTNEY BRIDGE · LONDON S.W.6

Glass Reinforced Plastics

edited by Phillip Morgan, M.A.

Many developments in the field of glass-reinforced plastics have called for considerable changes in this important book. The text has been largely re-written bringing together all the latest information about the raw material, fabrication techniques and specialized applications. From all leading booksellers,

2nd edition 45s net, by post 46s 9d.

Published by Iliffe & Sons Limited, Dorset House, Stamford St., S.E.1



What the installation of the model "QX" can mean in the modern home.

Electric **Gentral** Heating in the home

- ★ Easily adjustable thermostatic control.
 ★ The dimensions of the largest model being only 7" high and 41" long allows it to be installed inconspicuously in the home, resulting in great space saving.
- Does away with fuel storing, handling, and ash disposal. Also there is no fire risk from the fuel (electricity) that it uses.
- ★ No flues or chimneys required.
 ★ No fumes, no noise.

Please send for fully descriptive literature.

SANTON LTD · NEWPORT · MON



EN-TOUT-GA



Final 800 Metres, PAN AMERICAN GAMES, CHICAGO, 1959 - "En-Tout-Cas"

Hard Lawn Tennis Courts

Running Tracks

Football Grounds

Bowling Greens

Cricket Pitches

Swimming Pools

Squash Rackets Courts

THE EN - TOUT - CAS

SYSTON, LEICESTER (Syston 3322-7). London Office: Harrods (4th Floor), Knightsbridge, S.W.1.

OFFICIAL ANNOUNCEMEN APPOINTMENTS CONTRACTS

Rate: 25/- per inch and pro rata, minimum half inch. Close for press 1st post Monday for following Wednesday Issue

APPOINTMENTS

Barnet Urban District Council
PART-TIME ARCHITECTURAL ASSISTANT

PART-TIME ARCHITECTURAL ASSISTANT
APPLICATIONS are invited for the appointment of a part-time Architectural Assistant.
Salary pro rata to Grade APT IV £1,065/£1,220
per annum, plus London weighting. Candidates should hold a recognized professional qualifications and experience, together with the names and addresses of two referees, should reach the Engineer and Surveyor, Ravenscroft House, Wood Street,
Barnet, Herts, on or before 12 noon on Thursday, February 4, 1960.

ALFRED S. MAYS,
Clerk of the Council.
Municipal Offices,

Municipal Offices, Wood Street, January 15, 1960.

16052

Barnet Urban District Council
ARCHITECTURAL ASSISTANT
(Housing and General)

APPLICATIONS are invited for the appointment of an Architectural Assistant, salary in accordance with APT Grades III or IV, according to qualifications and experience.

Duties are likely to include design and construction of Council housing and other buildings, maintenance of existing public buildings and town planning redevelopment.

Applications, stating age, qualifications and experience, together with the names and addresses of two referees, should reach the Engineer and Surveyor, Ravenseroft House, Wood Street, Barnet, Herts, on or before 12 noon on Thursday, February II, 1960

ALFRED S. MAYS.

Cierk of the Council.

Municipal Offices,

Municipal Offices, Wood Street, Barnet, Herts. January 22, 1960.

South Eastern Electricity Board ARCHITECTURAL ASSISTANT Surveyor's Section, Board Headquarters

Surveyor's Section, Board Headquarters
ANNUAL salary £795-£870 under N.J.C.
Grade 4. Applicants should have experience in
the preparation of working and detail drawings
for offices, stores, workshops, garages, showrooms
and electricity substations and be at Intermediate
level of an appropriate professional body.
Superannuable. Applications, quoting ABN, and
naming two referees, to the Surveyor, Sechuard,
10 Queen's Gardens, Hove, 3, Sussex, by February 17, 1960.

GEORGE WRAY GEORGE WRAY, Secretary, [608]

ARCHITECTURAL ASSISTANT
REQUIRED by Darlaston U.D.C. Salary within Grade APT III (£880/£1,065) according to qualifications and experience. Preference will be given to candidates holding the Final Examination of the Royal Institute of British Architects.

The appointment is subject to the usual conditions, including the passing of a medical examination. Consideration will be given to the provision of housing accommodation if required.

The post offers a wide variety of experience including the development of schemes for a works depot, housing, shops, branch library, sports pavilion, etc., and also work in connection with central area redevelopment.

Applications, stating age, qualifications and experience; and giving names and addresses of two referees, should reach the Clerk of the Council, Town Hall, Darlaston, S. Staffs, not later than first post February 17, 1960. [610]

University of Reading
BUILDINGS OFFICER

APPLICATIONS are invited for the newly created post of Buildings Officer. The University is now engaged in its current (1957-63) programme on the construction on planning of six major buildings, involving an eapenditure of work is likely to be on this scale.

Candidates will be expected to have had good experience in relation to larce-scale building projects. Possession of an appropriate professional qualification is desirable.

The person appointed should take up his duties as soon as possible. The initial salary of the Buildings Officer will be between £1,650/£2,000 per annum, according to age, qualifications and experience.

Further particulars may be obtained from the Further particulars may be obtained from the Registrar (Room 22, O.R.B.), The University, Reading, by whom applications should be received not later than March 5, 1960. [6100

W. S. ATKINS & PARTNERS
(Consulting Engineers)
REQUIRE qualified Architects and Architectural
Draughtsmen in their architectural department to
work on major industrial projects, Conditions of
service include a nive-day week and superannuation scheme, Applications should be addressed to
the Personnel Manager, 158 Victoria Street,
S.W.I. [0400

Air Ministry, Works Design Branch
REQUIRES in London and Provinces Architectural Assistants with adequate training and drawing office experience. O.N.C. (Building) an advantage. Work includes site layouts, sketch plans, working drawings and details in permanent and semi-permanent construction. Financial assistance and time off given for recognized courses of study. Promotion and pension prospects. Five-day week with 18 working days' leave per year initially. Overseas tours for which special allowances granted. Salary in London ranges from £680 (age 25) to £900 p.a. for men; from £673 to £868 p.a. for women; somewhat lower in Provinces. Commencing salary dependent on age, qualifications and experience. Applicants, who must be natural born British subjects, should write to Air Ministry. W.G.c., Lacon House, Theobald's Road, London, W.C.I., or to any Employment Exchange (quoting Order No., King's Cross 3744), giving age, details of training, qualifications, full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed,

[0889]

City and County of Newcastle upon Tyne
City Architect's Department
THE City Architect will be pleased to receive applications for the following appointments in the Department in connection with the new Town Hall project:
Senior Assistant Architects (two vacancies).
APT Division Grade IV (£1,065/£1,220) per annum.

APT Division Grade IV (£1,065/£1,220) per annum.

These posts will offer ideal opportunity for architects wishing to work on an important building involving finishes of high quality. It is anticipated that work on the site on the first three blocks of the new Town Hall will commence in April, 1960, and the whole project is estimated to cost over £2,000,000. A high standard of design ability and an appreciation of and experience in good quality building work is essential.

Application forms and full particulars may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.J., City Architect, 18 Cloth Market, Newcastle upon Tyne, 1.

Closing date for receipt of completed applications: Thursday, February 18, 1960.

JOHN ATKINSON,

Town Clerk,

Town Hall, Newcastle upon Tyne, 1. January 28, 1960.

Borough of Bexley

ARCHITECTURAL ASSISTANTS

APPLICATIONS are invited for two appointments in the Borough Engineer and Surveyor's Department. The salary for each of these posts is within Grade APT II (£765/£880 per annum) plus London Wei-hting. Preference will be given to suitably qualified candidates with experience of housing and school projects.

Form of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge. Broadway, Bexleyheath, Kent, to whom completed applications must be returned by Saturday, February 20, 1960.

The Council may be prepared to assist in the provision of housing accommodation. Canvassing will disquality applications.

will disqualify

ARTHUR GOLDFINCH, CH, Town Clerk. [6103

Sheffield Regional Hospital Board
APPLICATIONS are invited for appointment as
Clerk of Works with responsibility for supervision
of capital works at hospitals in the Nottingham
area involving building, reinforced concrete and
similar work. The appointment is temporary but
is likely to be for at least two years. Applicants
must have served an appointieship in one of the
recognized building trades and have had experience as a Clerk of Works on large schemes.
Salary (at present under review) will be in the
range of £11 5x/£15 15x per week according to
qualifications and experience. Travelling expenses
between contracts are payable and the ownership
of a car would be an advantage.
Application stating age, qualifications and
giving full details of experience and projects
supervised, including costs, together with the
names of three referees, should reach the Secretary to the Board, Fulwood House, Old Fulwood
Rund, Sheffield, 10, not later than February 12,
1960.

Borough of Aldershot Borough Engineer and Surveyor's Department
ASSISTANT ARCHITECT

ASSISTANT ARCHITECT

APPLICATIONS are invited for the position of Assistant Architect on the staff of the Borough Engineer and Surveyor at a salary according to the Grade APT IV. Applicants must be Corporate Members of the R.J.B.A.

A five-day week is in operation,
The appointment will be subject to one month's notice on either side, to the provisions of the Local Government Superannuation Acts, and to the successful candidate passing a medical examination.

examination,
Applications stating age, qualifications and
experience, together with the names and addresses
of two referees should be sent to the Borough
Engineer and Surveyor, Town Hall, Aldershot,
not later than Friday, February 12, 1960.
Housing accommodation will be made available
if required.

H. R. SALES

H. B. SALES, Town Clerk.

[6082

Town Hall, Aldershot. January 25, 1960.

County Borough of Derby
Borough Architect's Department
(a) Senior Assistant Architect, APT Grade IV
(E) 05/E1,200 per annum). Qualifications:
(b) Senior Architect, APT Grade IV
(C) Senior APT Grade

A.R.I.B.A.

(b) Senior Assistant Architect, Special Grade

(£785/£1,070 per annum). Qualifications:

A.R.I.B.A.

(c) Junior Architect, General Division (£210/£595) per annum). Qualifications: Probationer

P.I.B.A.

£395 per annum). Qualifications: Probationer
R.I.B.A., or:

Assistant Architect, APT Grade I (£610/£765
per annum). Qualifications: Intermediate R.I.B.A.
(d) Junior Quantity Surveyor, General Division
(£210/£595 per annum). Qualifications: Student
member R.I.C.S. with previous experience in
Quantity Surveyor's office, or:

Assistant Quantity Surveyor APT Grade I

member R.I.C.S. with previous experience in Quantity Surveyor's office, or:
Assistant Quantity Surveyor, APT Grade I (610) (7h6 per annum). Qualifications: Intermediate R.I.C.S. with good experience in working up Bills of Quantities and Final Accounts, measuring on site and taking off for small works. Commenting salary according to qualifications and experience. Permanent superannuable appointments, subject to one month's notice and to medical examination. National conditions of service.

Forms of application obtainable from, and to be returned to, the Borough Architect, The Council House, Corporation Street, Derby, not later than Monday, February 22, 1960. G. H. EMLYN JONES,

January 28, 1960.

APPOINTMENT of:

APPOINTMENT of:

(a) Assistant Engineer, Grade APT I (£610/£765) or II (£765/£880).

(b) Architectural Draughtsman, G.D. (£210/£765).

Applications are invited for the above appointments in one or other of the above grades, according to experience and qualifications.

The Council have in hand a large programme of major works including new offices, multi-storey flats and car parks, housing estates, hierway and sewerage works and opportunities exist for gaining excellent experience in municipal engineering and architecture.

ing excellent experience in municipal engineering and architecture.

Forms of application and further details and conditions of appointment may be obtained from the undersigned to whom completed forms should be returned not later than Monday, February 15, 1960.

F. W. DAWKES, Borough Engineer and Surveyor.

Newnham House, Horne Lane, Bedford.

16105

The South Wales Electricity Board SENIOR ARCHITECTURAL DRAUGHTSMAN

SENIOR ARCHITECTURE APPLICATIONS are invited for the position of Senior Architectural Draughtsman at the Board's Headquarters, St. Mellons, Cardiff.
Salary: D.5–£790/£890 per annum. N.J.B.

Agreement.

The successful applicant will be required for work in connection with offices, showrooms, workshops and buildings to house electrical gear and machinery and must be capable of working up from desirns to the completion stage, including all necessary detailing. He must have obtained or be studying for Membership of the R.I.B.A. Applications, stating age, present position,

Applications stating age, present position, present salary, qualifications and experience should be addressed to the Secretary of the Board, St. Mellons, Cardiff, so as to reach him not later then Tuesday, February 23, 1960.

Envelopes should be marked 20,60. [6096]

MISCELLANEOUS SECTION

rate of 6d. per line, minimum 1/6d.

RATE: 1/9d per line, minimum 3/6d, BOX NOS. add 2 words plus 1/- for average line 6 words. Each para charged registration and forwarding replies which separately. Advertisements for Situations Wanted are accepted at the specially reduced Building News," Dorset House, Stamford Street, London, S.E.I.

SEMI-DISPLAY Advertisements with contralised lines are charged at 25/- per inch. and pro rata, minimum half inch.

PRESS DAY, Monday. Remittances payable to Messrs. Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.I.

No responsibility accepted for errors

APPOINTMENTS (cont)

Rate: 25/- per inch and pro rata, minimum half inch.

County Borough of West Bromwich

APPLICATIONS are invited for the following permanent appointments:
(a) Assistant Architect. Salary Grade APT IV (£1,065/£1,220).

(b) Architectural Assistant, Salary Grade APT II (£765/£880). (c) Architectural Assistant. Salary Grade APT 1 (£610) £765).

(£610/£765).

Applicants for post (a) should be A.R.I.B.A. and for post (b) should have passed the Intermediate examination of the R.I.B.A.

N.J.C. Conditions of Service.

Applications naming two referees to the undersigned by February 12, 1960.

W. H. GREENWOOD,

Borough Engineer and Surveyor,

Town Hall.

Town Hall, West Bromwich.

Borough of likeston

APPLICATIONS are invited for the appointment of Architectural Assistant within the Grade APT IV (£1,065/£1,220).

Commencing salary to be according to qualifi-

ons and experience, ousing accommodation available. Canvassing

ualifies disqualifies.

Application forms and conditions of appointment obtainable from A. O. Marshall, Borough Surveyor and Water Engineer, Town Hall, Ilkeston, to whom they are to be returned by Wednesday, February 24, 1960.

J. YATES, Town Clerk

Paddington Borough Council DRAUGHTSMAN

STARTING salary according to qualifications and experience. Suitable for probationer member, R.I.B.A. Applications should state age, experience, present and past appointments, names of two referees and should reach me by February 15, 1960 (quoting A.452).

W. H. BENTLEY

Town Hall, Paddington, W.2.

TENDERS

Rate: 25/- per inch and pro rata, minimum half inch.

Borough of Epsom and Ewell CONSTRUCTION OF BOUNDARY WALLING THE Corporation invite tenders from experienced contractors for the construction of brick or flint

THE Corporation invite tenders from experienced contractors for the construction of brick or flint boundary walling at the junction of Wilmerhatch Lane and Headley Road, Epsom.

Copies of the Plan, Conditions of Contract, Specification, Bill of Quantities, Forms and Conditions of Tender may be obtained from the office of Mr. Colin Cobbett, A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, Town Hall, Epsom, during working hours upon payment of a deposit of £2 2s, Deposits will be returned to contractors submitting a bona fide tender not subsequently withdrawn.

Tenders must be delivered to me at the address mentioned below not later than noon on Monday, February 15, 1960, and no tender will be received and considered unless it is enclosed in a plain sealed envelope endorsed "Walling—Wilmerhatch Lane." This envelope must not bear any mark or name indicating the sender.

The Corporation do not bind themselves to accept the lowest or any tender.

Town Hall,
Town Clerk,
The Parade

The Parade,

urrey January, 1960.

ARCHITECTURAL APPOINT-MENTS VACANT

Rate: 1/9 per line, minimum 3/6, average line six words.

ARCHITECTURAL ASSISTANT required in Birmingham office for preparation of working drawings, specifications, etc. Ability to drive a car an asset. Salary according to experience. Pension scheme. Box 7120. [6085]
ARCHITECTURAL ASSISTANT required by the Area Architect, Wates Ltd., Birmingham, Applicants should possess sound knowledge of construction and be capable of preparing working and detailed drawings, particularly on housing and multi-storey projects. Salary, commensurate with ability, experience and enthusiasm. Five-day week and superannuation scheme. Apply giving full details to: Wates Ltd., Building & Civil Engineering Contractors, Exchange Buildings, New Street, Birmingham, 2. Tel.: MID 3852/3. [6108]

ARCHITECTURAL ASSISTANT coportions of training charge of London office. Good opportunity for progressive young architect. Write giving particulars of qualifications and salary required to Box 6936.

ASSISTANT required by ARCHITECTURAL ASSISTANT required with good general training, capable of taking charge of London office Good opportunity for pro-

ARCHIFECTURAL ASSISTANT required by West End architects, small, busy, varied practice, Qualifications not essential. Salary commensurate with ability and experience. Howard Kelly and Partners, 11 Duke Street, W.1, WELbeck 1995.

ARCHITECTURAL ASSISTANTS OF Final Inter-standard required for work on industrial buildings. Excellent opportunities in an expanding London office. Apply stating age, experience and salary range, to the Chief Architect, Nuclear Civil Constructors, 52-55 Carnaby Street, London, [0820]

ARCHITECTURAL ASSISTANTS, senior and junior, wanted. Apply in writing, stating experience and salary desired, to Ian G. Lindsay & Partners, 17 Great Stuart Street, Edinburgh, 3.

ARCHITECTURAL ASSISTANTS and ARCHI-TECTURAL DRAUGHTSMEN required by large ARCHITECTURAL ASSISTANTS and ARCHITECTURAL DRAUGHTSMEN required by large national corporation with world wide interests. Staff restaurant and social club, etc. Applications with full particulars including salary required to Box 3172, c/o Charles Barker & Sons Ltd., Casteway House, London, E.C.4.

ARCHITECTURAL ASSISTANT, London, Final standard. Industrial and commercial, Progressive and interesting. Salary according to experience and ability. Box 366.

[0079]

ARCHITECTURAL ASSISTANT, Intermediate standard. Busy London office, Good prospects. Box 3668.

[0080]

ARCHITECTURAL ASSISTANT at Final standard. ARCHITECTURAL ASSISTANT at Final standard. Branderd. Busy London office, Good prospects, 10080 ARCHIFECTURAL ASSISTANT at Final standard required by Buckinghamshire office. Interesting and varied work with scope for initiative and responsibility. State age, experience and salary required to Box 5143. [0136 ARCHIFECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20 Bedford Square, London, W.C.1. [0916 ARCHIFECTURAL ASSISTANTS, Senior and Junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Write Box 5793. [0999] Write Box 5793. [0999

ARCHITECTURAL ASSISTANT required of at least Intermediate standard. Chas. Smith & Son, F/A.R.I.B.A., 164 Friar Street, Reading. [6053

ARCHITECTURAL ASSISTANTS required. R.I.B.A. Intermediate standard with some office experience. Varied and interesting work. Five-day week. Good salaries for keen and competent people. William Crabtree, F.R.I.B.A., 8 Robert Adam Street, W.I. (WELbeck 9909). [6068

ARCHITECTS required for interesting work in progressive office. Salary according to age and experience. Apply in writing to Oxley and Bussey, A/A.R.I.B.A., 91 Pinstone Street, Sheffield, 1. [6071

ARCHITECTS' OFFICE with modern approach

ARCHITECTS' OFFICE with modern approach to design requires assistants of intermediate and final standard, London or Reading, for interesting and varied work. Good salary, Eric G. V. Hives & Sons, 80 Wimpole Street, Cavendish Square, W.I., and 46 Queen's Road, Reading, Apply in first instance to Reading (Telephone 55484/5).

CAPABLE Architectural Assistants (all grades) required in a modern office in Hemel Hempstead. Interesting and varied work. State age, training, qualifications and/or experience. Box 7050, 16062 CIVIL ENGINEERING or Architectural Assistant (not necessarily qualified) for sales appointment with London company having world-wide interests, and manufacturing products used in building construction.

Applicants should be aged 25-30, able to read drawings and should have site experience. He would be required to visit civil engineers, architects and construction sites and to prepare specifications.

Salary according to age and experience, pension heme available.

Write with full details to Box 7153. [6094]

COVELL & MATTHEWS

covell & Matthews
require
capable and enthusiastic
Senior and Junior Assistants
to work on large central area redevelopment
projects
Salary according to experience
Five-day week
Ring REGent 2291 [5951
ELIE MAYORCAS requires Senior Assistants
with minimum of three years' office experience in
this country. Write, giving particulars of architectural education and experience, and salary
required, to: 13 David Mews, Baker Street, W.1.
[0360]

BRITISH RAILWAYS

LONDON MIDLAND REGION

ASSISTANT ARCHITECTS

REQUIRED

APPLICATIONS ARE INVITED FOR VACANCIES IN THE OFFICE OF THE REGIONAL ARCHITECT AT EUSTON STATION, LONDON

The Electrification Programme offers great opportunities for imaginative designers and the work is of wide architectural scope and interest. In addition to vacancies for general architectural work the present Research Unit is to be strengthened and its activities will embrace standardisation of buildings, furniture, equipment and unit planning.

SALARIES are offered within the range £833 per annum to £1,200 per annum, with five-day week and concessionary

Apply in writing quoting reference No. 89 stating qualifications, age, experience and salary required to:

> W. R. Headley, A.R.I.B.A., A.A.Dipl., Regional Architect, Chief Civil Engineer's Office. 5a Euston Grove, London, N.W.1

> > Classified advertisements continued overleaf

ARCHITECTURAL APPOINT-MENTS VACANT (cont)

EXCEPTIONAL opportunity occurs for Architectural Assistants of Intermediate standard to gain experience in busy modern office dealing with industrial and commercial architecture at home and overseas. Scope for originality and contemporary design. Five-day week. Address applications, giving age, experience and salar-required, to Stuart Bentley, F.R.I.B.A., company architect to the Dunlop Group of Companies, Fort Dunlop, Erdington, Birmingham, 24—marked "Architectural Assistants". [6079]
FREDERICK GIBBERD requires at Harlow office

FREDERICK GIBBERD requires at Harlow office FREDERICK GIBBERD requires at Harlow office (a) Qualified Assistant Architects with experience and (b) Intermediate Standard Assistants. Good salaries in accordance with ability. Work includes public and commercial buildings, bridges, swimming baths, technical colleges, shopping centres and housing in the provinces and in Harlow. Houses and flats available. Please apply in writing to Frederick Gibberd, 19 The Rows, Stone Cross, Harlow, Essex. [6099]

Harlow, Essex. [6099]
INTERMEDIATE standard Architectural Assistant required immediately for work on exhibition and ancillary buildings. Write giving detaits of age, training and experience, if any, to the Staff Architect, Olympia Limited, Kensington, London, 10640

Architect, Olympia Limited, Reinsiguol, Lolloda, W. 14.

LARGE-SCALE development in London and industrial buildings in Home Counties, High office blocks and residential flats, Four Assistant Architects required, Senior and Intermediate standard. West End office. Five-day week. Good salaries and bonuses. Box 7076.

LONDON ARCHITECTS require Assistants of Intermediate and of Final standard for work on large scale University development. Salaries commensurate with experience, Five-day week. Telephone WHI 2552 or write Box 7100.

LONDON ARCHITECTS' OFFICE requires architect for University work. Candidate must be well above average, with five to seven years' responsible experience. Salary about £1,200. Telephone WHI 2552 for interview, or apply in writing to Box 7099.

TOWELL AND MOYA require Assistants, Please

phone WHI 2552 for interval. [0754 writing to Box 7009]

POWELL AND MOYA require Assistants, Please write to 36 Great Smith Street, S.W.l, or telephone ABBey 3156.

QUALIFIED ARCHITECT required, age approx. 28-35 years, particularly interested in high quality exhibition and interior work to take charge of small design studio. Salary £1,500/£2,000. Box 7022.

QUALIFIED ARCHITECT required. Bristol. OUALIFIED ARCHITECT required. Bristol. Industrial/commercial experience. Scope for individuality and freedom of expression. Good salary. Interesting work, Pension scheme. Assistants of Intermediate standard also required. Details of experience to W. H. Watkins, Gray & Partners, I Clare Street, Bristol, I. [6032 RESEARCH and development work in relation to the design of buildings and building elements for factory production. Architectural staff of varying grades required for this work in consultant's office. Whilst there are the usual luncheon wouchers, superannuation, etc., we assume the people we are anxious to get will be more interested in the type of work. Will those who are, piease apply to: A. M. Gear & Associates, IZ Manchester Square, London, W.1. [6097]

RESIDENT ARCHITECT required for peritwo years to supervise new residential buildings for Fourah Bay, the University College of Sierra Leone. Salary £2,000 p.a., house, passages, etc. Write to Frank Rutter, F.R.I.B.A., 2 Finchley Road, London, N.W.8 marking envelope confidential. SENIOR ASSISTANT ARCHITECTS, qualified and experienced, for Coventry office. Architectural assistants, intermediate or finals standard for Liverpool office. Important, interesting and varied work. Five-day week, pension scheme. Write, giving experience and salary required to Hellberg and Harris, F/F.R.I.B.A., 13 Queen Victoria Road, Coventry. [6059

SENIOR ARCHITECTURAL ASSISTANTS, and Juniors up to about Intermediate standard, required for varied industrial and commercial work in West End office. Scope for initiative and advancement. Salary from £500 to £1,000, according to age and experience, Five-day week. Write giving full details to Box 6379. [0888]

giving full details to Box 6379. [1088]

VACANCY FOR STAFF ARCHITECT

APPLICATIONS are invited for the above situation which will become vacant with a firm of contractors carrying out estate development in the Banbury area. The work involved is the design and layout of various types of houses, planning roads and sewers and the supervision of their construction.

Excellent office accommodation is provided forgether with secretary and other staff.

Applications to be made to the Managing Director, when salary would be agreed according to qualifications and experience. Box 7198. [6104]

WATFORD, HERTS, Two Architectural Assistances.

WATFORD, HERTS. Two Architectural Assi-tants, of at least R.I.B.A. Inter-standard required for lively, varied and expanding practice. Write or telephone, Dawe, Carter & Partners, 33 Clarendon Road, Watford 27296. [6026 will.TSHIRE COUNTY COUNCIL require auitably qualified Assistant Architect, salary scale £785-£1,070. Applications, naming three referees to the Clerk of the Council, County Hall, Trowbridge, by February 20, 1960. [6083

bridge, by February 20, 1960. [6083 WILLIAAM J. COX (Sales) LTD. of London and Tring—the Acrylic Rooflight Manufacturers—have vacancy for young man, preferably will drawing office experience. Subject to suitability, he will be offered a permanent and responsible position connected with sales and development of rooflights. Starting salary in accordance with experience, but not less than £700 p.a. Write to Managing Director at 559 Holloway Road, N.19.

WORCESTERSHIRE. Required at once Architectural Assistants, Senior and Junior, for busy office with a varied selection of work, in pleasant surroundings. Applicants must be good draughtsmen with a keen sense of design. State salary and when free, Pemberton & Bateman, F/R.J.B.A., 21 Vine Street, Evesham. [6087]

The Royal Infirmary of Edinburgh and Associated ARCHITECTURAL ASSISTANT

APPLICATIONS are invited from candidates holding the Intermediate Certificate of the R.I.B.A. and having practical experience. Varied and interesting work, Starting salary £525/£605 per annum according to age and experience. Apply in writing to Personnel Officer, Royal Infirmary, Lauriston Place, Edinburgh, 3. [5998]

MISCELLANEOUS

ARCHITECTS, surveyors, demolishers, etc., we are buyers of redundant and surplus refrigeration equipment, all kinds. We dismantle and collect. Best prices given. Write Box 5516.

REFRIGERATED SHELVES for bottle cooling beer and wine coolers, etc., for hotel, catering beer and wine coolers, etc., for hotel, catering and licensed trades, supplied and installed, G.V.E. Ltd., 231 Strand, W.C.2. FLE 5947.

SITUATIONS VACANT

COMPETENT DESIGNER / DRAUGHTSMAN required who is prepared to specialize in drawings in connection with the manufacture of fibrous plaster. Apply in own handwriting stating age, experience and salary required to: Assistant Secretary, Trollope & Colls Lid., Trocoll House, One Noble Street, Gresham Street, E.C.2. [6049]

CONCRETE ENGINEER required to promote sales of patented expansion joints (already well introduced to the market). Contacts with consultants, architects and contractors desirable. Remuneration by salary, car expenses and bonus on expanded sales. Apply Box 7162, giving full details of experience, etc. [6106]

SENIOR ASSISTANT, with at least 10 years' experience, required in Plymouth. Capable of handling jobs under general supervision of principals. Apply, with full details, stating salary required. Box 7138, [6090]

WORK WANTED

BUILDER and Decorator, A. G. Davenport, 274 Downham Way, Downham, Kent, Lee 8796. Keenest prices for all types of interior and exterior decorating. Try us! [6006

INQUIRIES invited for manufacture of builders' engineering items—steel frames, trusses, steel doors, etc., particularly in specialist work. Keen prices and quick delivery, Burley's, Weybridge, Surrey, Byfleet 4111. [5650

EXCAVATION sub-contracts, site development, overburden removal, clay getting, earth dam construction, etc. Technical staff available to analyse, programme and price complex projects. Particular attention given to finish and compaction. D.9, D.8, TD.18 and TD.14 scrapers, excavators, loading shovels and lorries available with competent and imaginative supervision for execution of work. Also interested in oversease projects calling for not exceeding 10,000yd per week output. Dick Hampton, Blacknest, Alton, Hants. Tel.: Bentley 2241.

G. BARTER & CO., Industrial Decorative Spray and Brush Painters (labour only on contract), supply equipment, Ia Whitton Way, Hounsl Middlesex, HOUnslow 9615, SOUthall 3815 10083

ARCHITECTURAL CARVINGS

CARVINGS, architectural (composition) for built-in furniture, wall panelling, etc. Variety of 2,000 different types of varying periods. On view at showroom. Michael Shavelson, 105/107 Brick Lane, E.I. Regret no catalogues. Telephone:

PRIVATE DRIVES AND ROADS

PRIVATE Drives, Forecourts, Estate Roads, etc., resurfaced or reconstructed by specialists. Tarmacadam or Tarspraying. Estimates free. Stanley Lucas (Slough) Ltd., Alexandra Road, Slough 21279,

BUSINESS & PROPERTY

TOWER BRIDGE, S.E.1 (close). 53,000 sq ft for redevelopment. Factory, office and warehouse premises part single-storey, north-flighted, and part three floor, standing on a site of 1½ acres including 12,000 sq ft of open land for extensions. Modern office block, Central heating, Lift.

Freehold for Sale, Chamberlain & Willows, 23 Moorgate, E.C.2 (MET 8001). [6095]

INDEX TO ADVERTISERS

Official Notices, Tenders, Auctions, Legal and Miscellaneous Appointments on pages 50, 51 and 52

Abix (Metal Industries) Ltd Adshead Ratcliffe Ltd Allied Guilds	48 20	Eastwoods Ltd	Latex Upholstery Ltd 44	Sadd, John, & Sons Ltd	36 49 18
Allied Ironfounders Ltd. Associated Metal Works (Glas- gow) Ltd. Atlas Asbestos Cement Co. Ltd.	17 41	Floor Treatments Ltd 46	Mander & Germain Ltd. 46 Maxwell, Andrew 45 Morris Rubber Industries Ltd. 42 Mullen & Lumsden 39	Sealocrete Products Ltd	9 IBC 48 44
Baker, A. W. Batley, Ernest, Ltd.	41 22	Gas Council, The OBC General Electric Co. Ltd 10 & 35 Gilbert-Ash Ltd 5	Natural Asphalte Mine Owners'	Stainless Steel Sink Co. Ltd., The Steven, A. & P., Ltd.	39 39
Brierley, S. J., (Wilts) Ltd Britannia Iron & Steel Works	44 39	Goodlass Wall & Co. Ltd	& Manufacturers' Council	Taylor, J., (Syston) Ltd Thorn, J., & Sons Ltd	41 43
British Coking Industry Assoc., The	48 38	Henderson, P. C., Ltd 24 Hermeseal Acoustics Ltd 16	Northarc Organisation, The 46	Thornborough & Son Ltd Timber Fireproofing Co. Ltd., The	30
British Lime Manufacturers British Plasterboard Co Burgess Products Ltd.	34 19	Hope, Henry, & Sons Ltd 25 Hotchkiss Engineers Ltd 39	Parker, Winder & Achurch Ltd. 42 Pilkington Bros. Ltd. 12/13 Pitch Fibre Pipe Association of	Ventor Terrazzo & Mosaic Co.	32
Celotex Ltd	23 29 15	I.B.M. United Kingdom Ltd 46 Imperial Aluminium Co. Ltd IFC Industrial Engineering Ltd 37	Precast Utilities (London) Ltd. 33	Vigers Bros. Ltd.	41 22
Crapper, Thomas, & Co. Ltd Crittall Manufacturing Co. Ltd.	14	raquatrial Engineering Etc 37	Quicktho Engineering Ltd 47	Watco (Sales) Ltd	42
Danaura Ltd. Denison French Ltd. Denny Mott & Dickson Ltd	39 32 21	Kay & Co. (Engineers) Ltd. 31 Kerner-Greenwood & Co. Ltd. 41 King, G. W., Ltd. 47	Richardson & Starling Ltd 39 Rippers Ltd 8	Williams, John, & Sons (Cardiff) Ltd.	6/7

THE ARCHITECT & BUILDING NEWS READERS' INFORMATION SERVICE

Catalogues and further information relating to manufacturers' products mentioned in the editorial columns or advertised in this issue will be forwarded if you fill in the sheet overleaf, fold, and post this prepaid form. - FOLD HERE

Postage will be paid by Licensee No postage Stamp necessary if posted in Great Britain

Northern Ireland

BUSINESS REPLY FOLDER Licence No. SE 591

ILIFFE & SONS LTD.,

THE ARCHITECT & BUILDING NEWS
Readers' Information Service,

DORSET HOUSE,

STAMFORD STREET,

LONDON, S.E.I

FOLD HERE

HAVE YOU FILLED IN YOUR NAME AND ADDRESS ?

TUCK IN THIS END

THE ARCHITECT & BUILDING NEWS READERS' INFORMATION SERVICE

ADVERTISED PRODUCTS

Issue dated 3 February 1960

H

3

新兴

Below is an alphabetical list of advertisers in this issue. Please indicate those on which you would like to receive catalogues or further information by a circle round the page number.

Abix (Metal Industries) Ltd Adshead Ratcliffe Ltd Allied Guilds	48 20 41	Eastwoods Ltd. 28 En-Tout-Cas Co. Ltd. 48	8 -	Latex Upholstery Ltd	44	Sadd, John, & Sons Ltd	36 49 18
Allied Ironfounders Ltd. Associated Metal Works (Glasgow) Ltd. Atlas Asbestos Cement Co. Ltd.	17 41 11	Floor Treatments Ltd 44	6		46 45 42 39	Sealocate Products Ltd. Sealocate Products Ltd. Secomastic Ltd. Small & Parkes Ltd. Sommerfelds Ltd.	9 IBC 48 44
Baker, A. W. Batley, Ernest, Ltd.	41	Gas Council, The OBC General Electric Co. Ltd 10 & 3 Gilbert-Ash Ltd.		Natural Asphalte Mine Owners'	-	Stainless Steel Sink Co. Ltd., The Steven, A. & P., Ltd.	39 39
Bawn, W. B., & Co. Ltd Brierley, S. J., (Wilts) Ltd Britannia Iron & Steel Works	44 39	Goodlass Wall & Co. Ltd	4 5		26 3	Taylor, J., (Syston) Ltd Thorn, J., & Sons Ltd	41 43
British Coking Industry Assoc., The	48	Henderson, P. C., Ltd		Northarc Organisation, The	46	Thornborough & Son Ltd Timber Fireproofing Co. Ltd., The	48
British Lime Manufacturers British Plasterboard Co Burgess Products Ltd	30 34 19	Hope, Henry, & Sons Ltd 2 Hotchkiss Engineers Ltd 3	5	Parker, Winder & Achurch Ltd. Pilkington Bros. Ltd 12/ Pitch Fibre Pipe Association of	42	Tyrol Sales Ltd	30 32
Celora Ltd	23 29 15	I.B.M. United Kingdom Ltd 4 Imperial Aluminium Co. Ltd IFO Industrial Engineering Ltd 3	C	Great Britain	27 33	Ventor Terrazzo & Mosaic Co. Ltd. Vigers Bros. Ltd.	41 22
Crapper, Thomas, & Co. Ltd Crittall Manufacturing Co. Ltd.	14	mountai Engineering Etd 3		Quicktho Engineering Ltd	47	Watco (Sales) Ltd	42 20
Danaura Ltd. Denison French Ltd. Denny Mott & Dickson Ltd	39 32 21	Kay & Co. (Engineers) Ltd 3 Kerner-Greenwood & Co. Ltd 4 King, G. W., Ltd 4	1	Richardson & Starling Ltd Rippers Ltd	39	Williams, John, & Sons (Cardiff) Ltd. Williams & Williams Ltd.	

EDITORIAL REFERENCES

New Products when published in the editorial columns are alphabetically listed. Please mark those letters where you would like to receive further information and catalogues. For information on other editorial content enter your inquiry in the space provided.

NEW PRODUCTS

Α	В	C	D	E	F	G	H	1	J	K	L	M
N	0	P	Q	R	S	T	U	V	W	X	Y	Z
Other I	Editorial	content:										
-									***************************************	-		

PLEASE WRITE IN BLOCK LETTERS

NAME		 To the second of the second of	
ADDRESS			
	tangenera in the management		
OCCUPATION			



Architects all over the world confidently specify SECOMASTIC for joint sealing, because SECOMASTIC has been proved to possess all the properties required in a mastic. Formulated on the results of 14 years' continuous laboratory research and field experience in more than 40 countries, SECOMASTIC is the answer to most of the joint sealing problems encountered in modern building

construction.

SECOMASTIC was used for pointing and sealing at Gateway House, London.

Architects: Trehearne, Norman, Preston & Partners



Teape & Co., (1919) Ltd.

of Wiggins,

FOR SEALING METAL WINDOWS and all other joints subject to movement

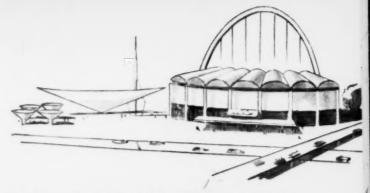
For further information please write to the Building Department SECOMASTIC LTD., BRACKNELL, BERKS. Tel: Bracknell 910 (10 lines)

Secomastic products also include: 'Secostrip' pre-formed mastic strip, 'Secoflex' Expansion joint sealer and 'Galvafroid' zinc-rich paint.



Tomorrow





Today's research in the Gas Industry aims at new and improved designs of space heaters and water heaters—automatic cookers with self-protected ignition—and more efficient flue systems—so that the Architect has greater scope to design even better buildings for tomorrow . . . AND TODAY—every industry and 12 million homes use GAS.

ISSUED BY THE GAS COUNCIL.

